BLUEBIRD™



Operators & Parts Manual

MODELS:

B124	H424G
B130	B530A
B130A	H530A
B142	H530AG
B424	H742
H424	H742G

MANUAL NO. 107999 REV. IR (10/17/02)

Lawn Aerators

Section 1 · Operator's Guide — Page

Section 2 · Operating Instructions — Page

Section 3 · Maintenance and Service Instructions — Page

Section 4 · General Product Information — Page

WARNING: Engine exhaust, some of it's constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

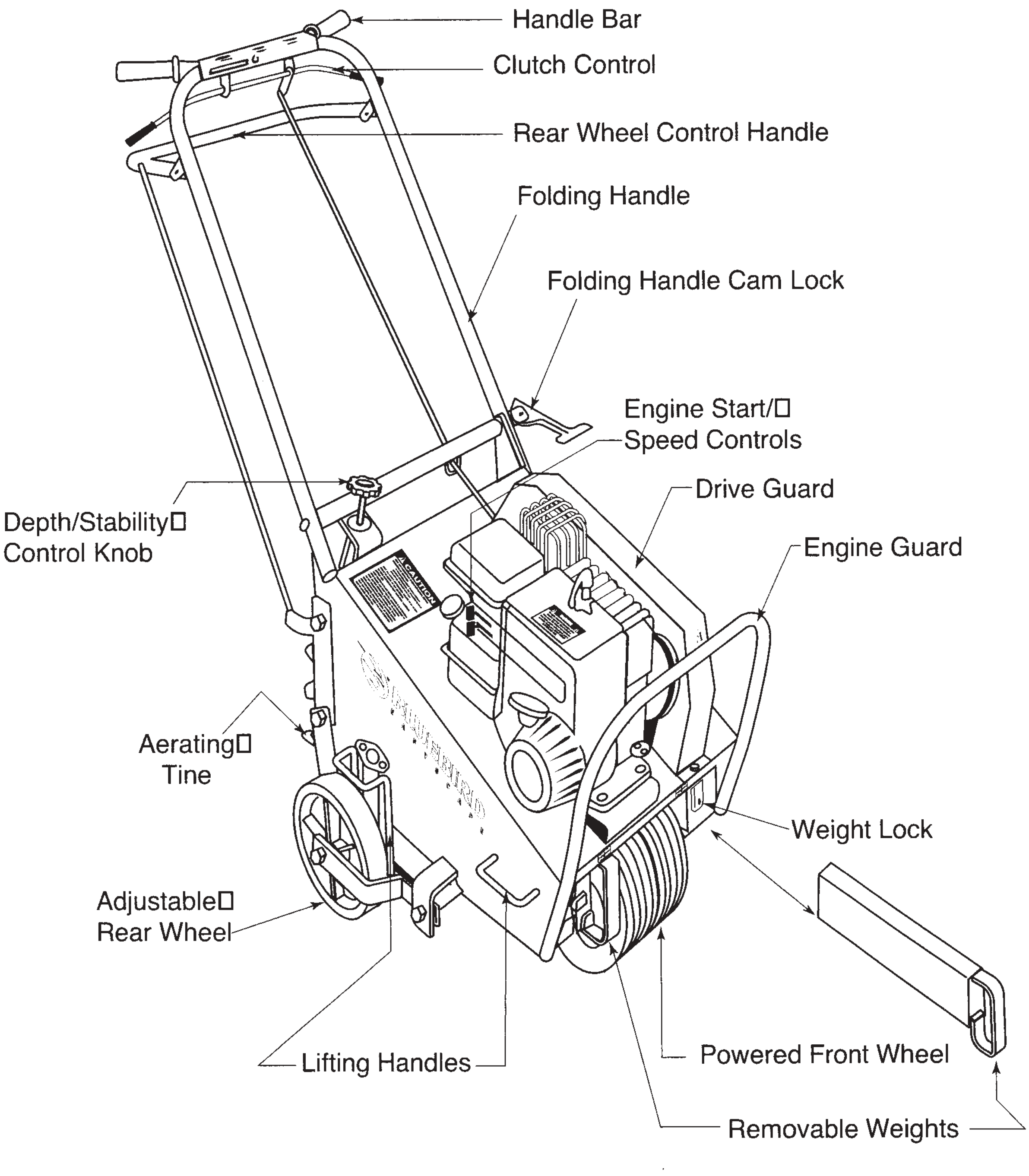
Operator’s Guide

SPECIFICATIONS

A) POWER UNIT	424	530A	742
Engine	3.5HP Briggs I/C (2.6kw) 4HP Honda (3kw)	3.5HP Briggs I/C (2.6kw) 4HP Honda (3kw)	3.5HP Briggs I/C (2.6kw) 4HP Honda (3kw)
Clutch	Belt tensioner	Belt tensioner	Belt tensioner
Primary drive	One V-belt (A-44”)	One V-belt (A-44”)	One V-belt (A-44”)
Secondary drive	Permalube Chain	Permalube Chain	Permalube Chain
Gear reduction	6:1	6:1	6:1
B) WHEELS			
Bearings	FRONT – ¾” (1.9 cm) sealed ball bearings with stamping kit REAR - ¾” (1.9 cm) roller bearing	FRONT – ¾” (1.9 cm) sealed ball bearings with stamping kit REAR - ¾” (1.9 cm) roller bearing	FRONT – ¾” (1.9 cm) sealed ball bearings with stamping kit REAR - ¾” (1.9 cm) roller bearing
Rear tires	8” x 2” (20 x 5cm) solid rubber	8” x 2” (20 x 5cm) solid rubber	8” x 2” (20 x 5cm) solid rubber
Front tire	10” x 6” (25 x 15cm) semi-pneu.	10” x 6” (25 x 15cm) semi-pneu.	10” x 6” (25 x 15cm) semi-pneu.
C) AERATION			
Tines	¾” - (1.9 cm) open spoon tine. 24 per unit	¾” - (1.9 cm) open spoon tine. 30 per unit	¾” (1.9 cm) open spoon tine. 42 per unit
Aeration width Hole pattern	17.5” (44.5 cm) 4.4” x 6.5" (11.2 x 16.5cm)	19” (48.3 cm) 3.8” x 6.5” (9.7 x 16.5cm)	25.5” (64.8 cm) 3.6” x 6.5” (9 x 16.5cm)
Core depth	Up to 3” (7.6 cm)	Up to 3” (7.6 cm)	Up to 3” (7.6 cm)
Holes per sq ft	6.7	7.7	8.1
Working speed	250 ft/min (4.57 km/h)	250 ft/min (4.57 km/h)	290 ft/min (5.3 km/h)
Productivity	Up to 23,000 sq ft/hr (2137 m2/h)	Up to 25,000 sq ft/hr (2323 m2/h)	Up to 40,000 sq ft/hr (3716 m2/h)
D) WEIGHTS			
Net weight	265 lbs (120 kg)	288 lbs (131 kg)	420 lbs (191 kg)
Shipping weight	209 lbs (132 kg)	355 lbs (161 kg)	487 lbs (221 kg)
Removable weights	2 x 36 lbs (16.3 kg)	2 x 36 lbs (16.3 kg)	2 x 36 lbs (16.3 kg)
E) DIMENSIONS			
Height	28" (71.1 cm) w/handle folded	37” (94cm) w/ handle folded	28” (71 1cm) less handle
Height overall	49.5" (126 cm)	51.5 (130.8cm)	52” (132cm)
Length	40" (101.6 cm) w/handle folded	39.5 (100.3cm) w/ handle folded	33”(83.8cm) less handle
Length overall	48" (122 cm)	57.5 (146.1cm)	54” (137cm)
Width	26.5" (67.3 cm)	29.75” (75.6cm)	38” (96.5cm),31” (78.74cm) w/o wls.
Shipping carton	28" x 29" x 43" (71 x 74 x 109 cm)	41” x 34” x 30” (104 x 86 x 76cm)	41” x 34” x 30” (104 x 86 x 76cm)

Operator's Guide

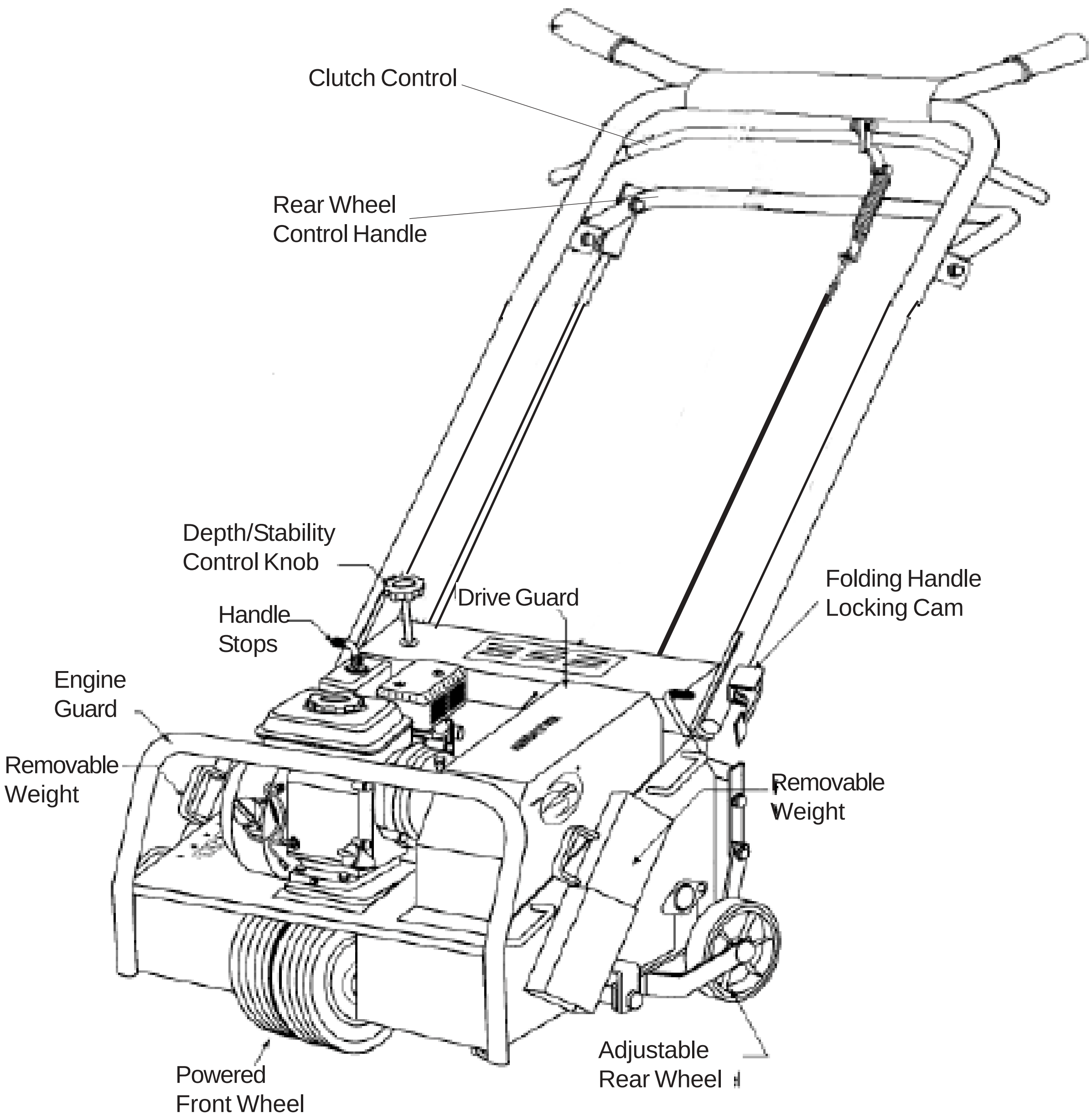
MODEL 424 - FEATURES AND CONTROLS



Note: Serial Number is located under Drive Guard.
CE MODELS: Serial number is located on the rear of the housing.

Figure 1

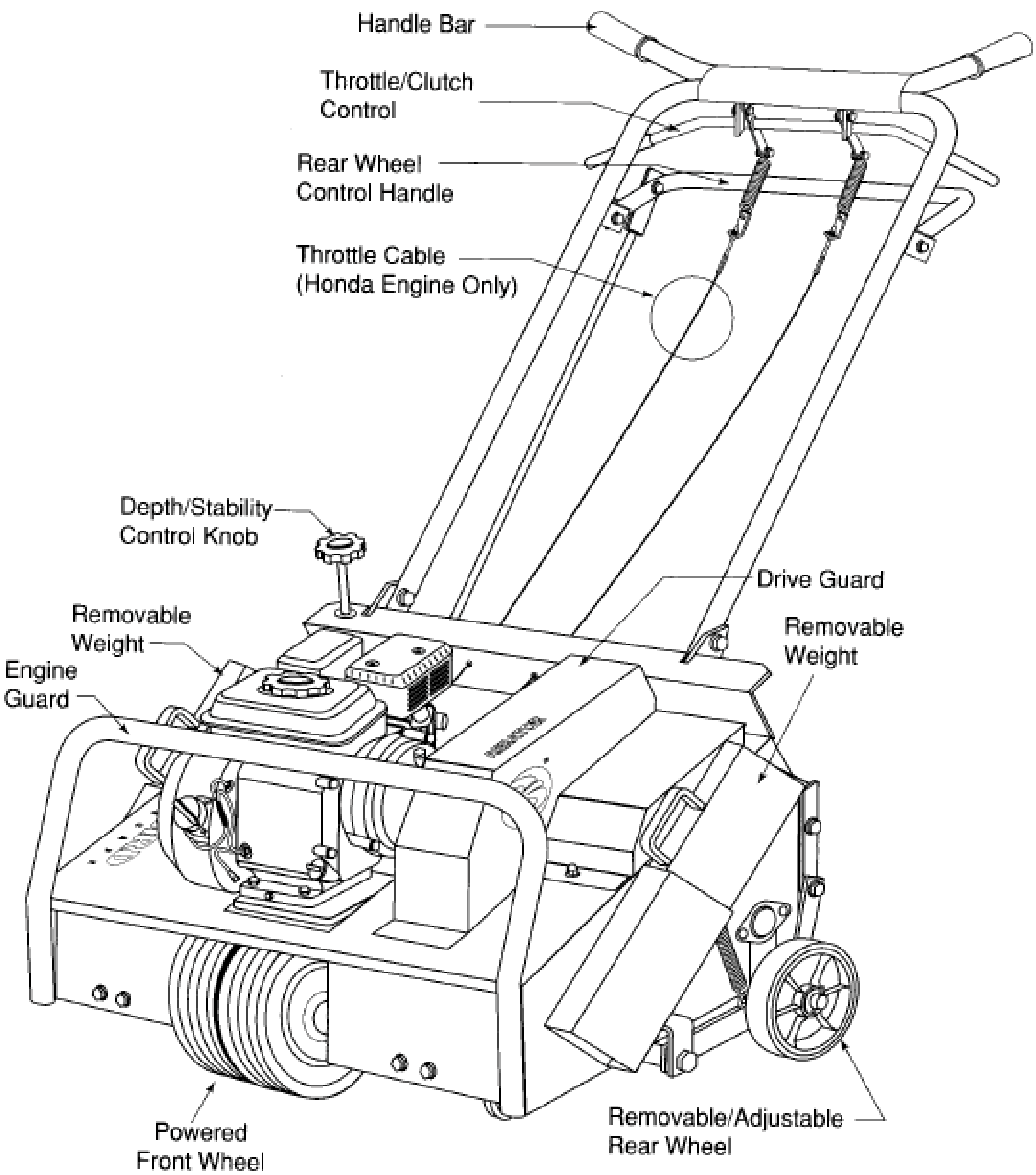
MODEL 530A - FEATURES AND CONTROLS



Note: Serial number is located on the rear of the housing.

Figure 2

MODEL 742 - FEATURES AND CONTROLS



Note: Serial Number is located on the rear of the housing.

Figure 3

Operator's Guide

GENERAL INFORMATION

This manual will assist you in the safe operation and proper maintenance of your Husqvarna equipment. Read it thoroughly before attempting to operate the machine. Call your dealer or Husqvarna if additional information is required.

The following safety symbols are used throughout the manual to alert you to information about unsafe actions or situations:

⚠ **DANGER** indicates immediate hazards that may result in severe injury or death.

⚠ **WARNING** indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage.

⚠ **CAUTION** indicates unsafe actions or situations that may cause injury, and/or minor equipment or property damage.

This equipment should not be modified without the manufacturer's prior written authorization. Doing so may not only affect the equipment's performance and durability, but also create safety hazards for the operator and the surroundings. Warranty will be void if changes are made to the equipment without the manufacturer's prior written authorization.

SAFETY PROCEDURES

DO: ⚠

- Read all maintenance and service instructions before attempting work.
- Read engine manufacturer's operating and maintenance instructions.
- Remove spark plug wire before commencing service.
- Inspect lawn to be aerated and remove rocks, wire, string and other objects that might present hazard before starting.
- Indentify and mark all ground objects to be avoided, such as sprinkler heads, stakes, water valves, clothes line anchors, etc.
- Use machine for lawn aeration only.
- Keep unsupervised children away from the equipment.
- Adopt safe lifting and moving techniques when loading/unloading and moving the equipment.
- Make sure all decals are in place.

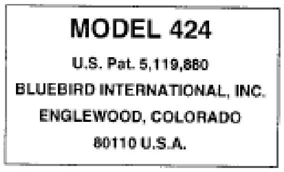
DO NOT: ⚠

- Do not run engine while servicing.
- Do not use on any surface other than grass.
- Do not operate on slopes exceeding 35% grade.
- Do not place hands or feet near moving or rotating parts.
- Do not lift Model 424 alone.
- Do not lift Model 530A.
- Do not lift Model 742
- Do not run engine in an unventilated space.
- Do not run engine while servicing. Remove spark plug wire before commencing service.
- Do not smoke or allow open flames or sparks near unit, and always stop the engine when refueling
- Do not remove guards when operating.
- Do not modify this equipment.
- Do not use this equipment for purposes other than lawn aeration.

SAFETY AND INSTRUCTION DECALS

The following decals are found on Model 424,530 and 742 aerators. If any are missing or not legible, replace them before operating aerator.

8343 Decal kit, Model 424
7630 Decal kit, Model 530A
7404 Decal kit, Model 742

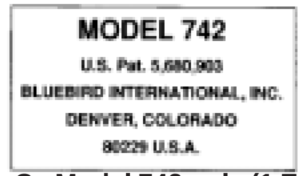


A - Model 424 only (1 EA)

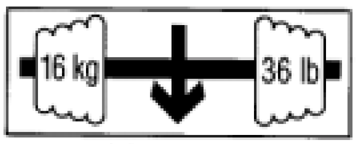


B - Model 530A only (1 EA)



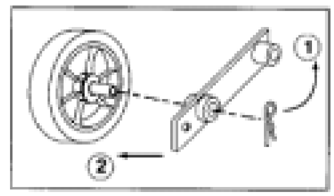


C - Model 742 only (1 EA)



D - Models 424, 530A & 742 (2 EA)

F - Models 424, 530A & 742 (1 EA)



E - Model 742 only (2 EA)

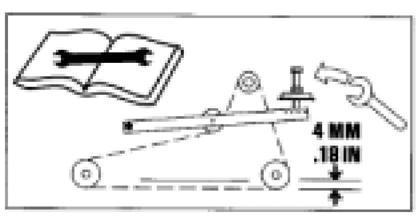


G1 - Model 530A (1 EA)

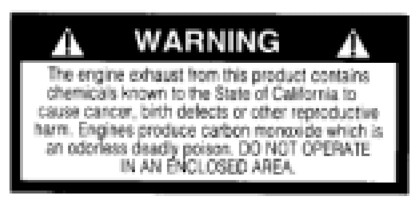


G2 - Model 424 & 742 (1 EA)





I - Models 424, 530A & 742 (1 EA)



J - Models 424, 530A & 742 (1 EA)

H - Models 424, 530A & 742 (1 EA)

BLUEBIRD™

K - Models 530A & 742 (1 EA)
424 (2 EA)

DECAL PLACEMENT - MODELS 424, 530A AND 742

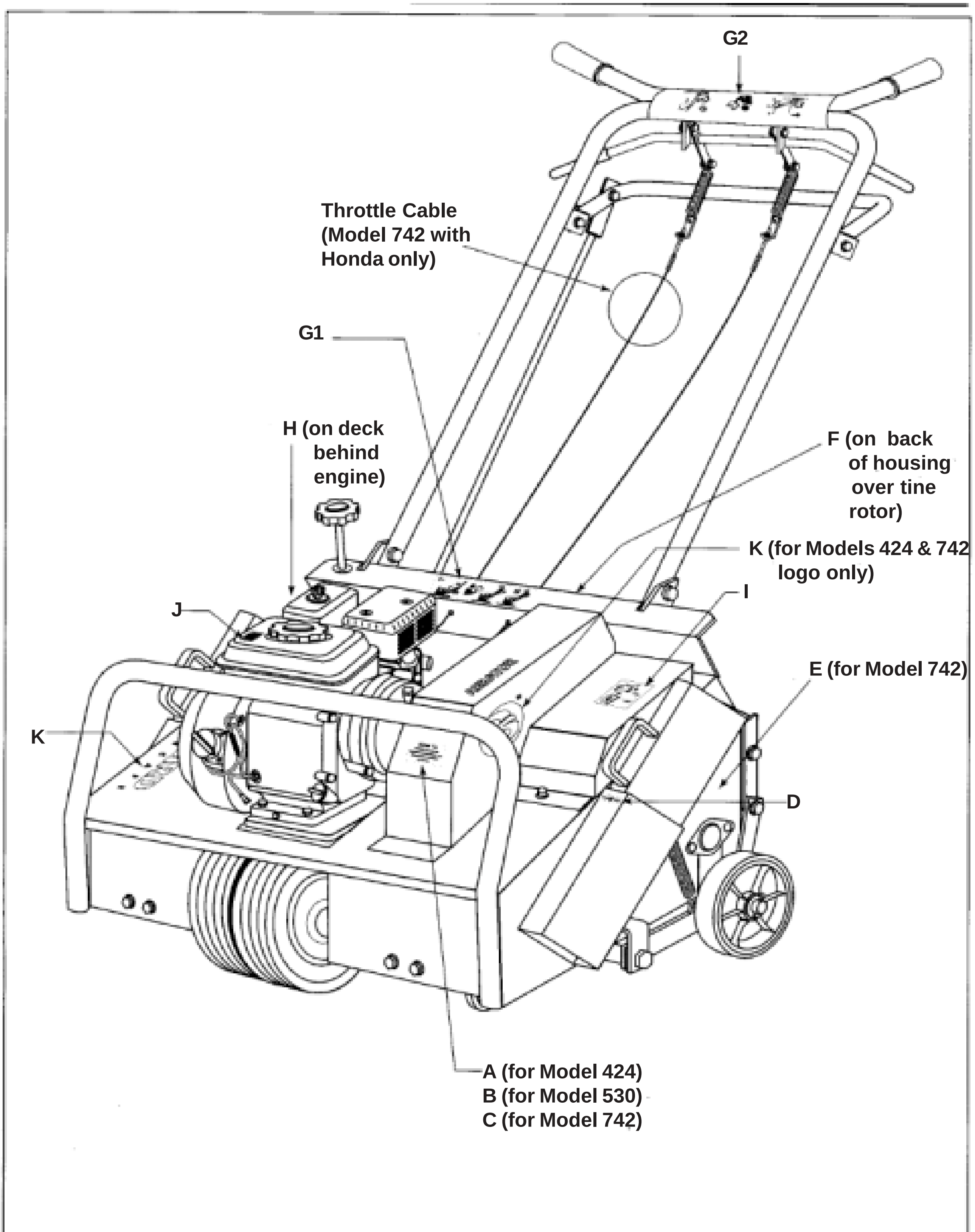


Figure 3

ASSEMBLY INSTRUCTIONS

Model 424

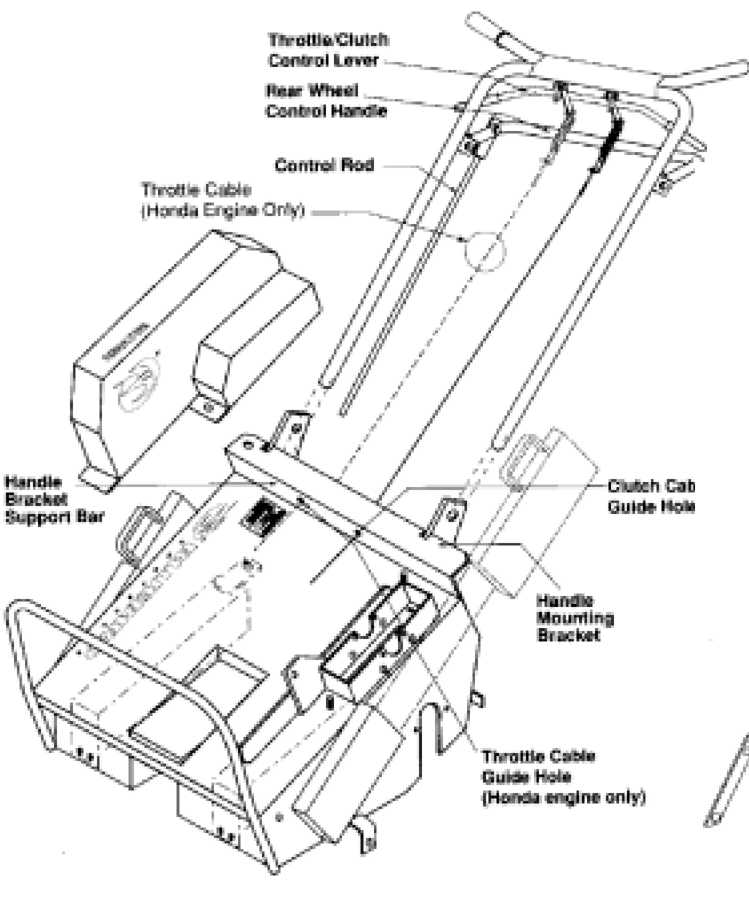
1. Remove wooden blocks. Note: Watch for nails and wood splinters. Wear eye protection.
2. Carefully cut open side of carton.
3. Lawn Aerator 424 is shipped with handle folded. Rear wheel control handle strapped together with the clutch control. First cut straps, then unfold handle. Lock handle in position using the cam lock lever.

Model 530A

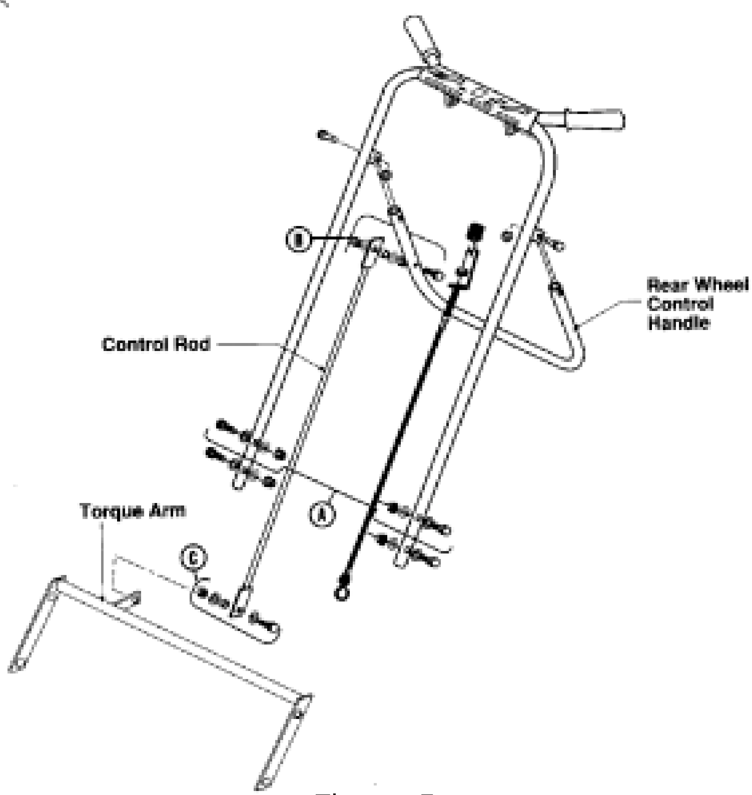
1. Wear eye protection. Remove wooden blocks. NOTE: Watch for nails and wood splinters.
2. Carefully cut open side of carton.
3. Lawn Aerator is shipped with handle folded. Lock handle in position using the cam lock lever.

Model 742

1. Wear eye protection. Remove wooden blocks. NOTE: Watch for nails and wood splinters.
2. Carefully cut open side of carton.
3. AR25 Lawn Aerator is shipped with the handle detached. Mount the handle using 2 each ½" wrenches.
   (A) Slide handle onto handle mounting brackets (see Figure 4).
   (B) Insert and tighten fasteners, which are located on handle mounting brackets (see Figure 5-A). For further detail on assembly, see parts section.
4. Connect top of control rod to rear wheel control handle with fasteners located on rear wheel control handle (see Figure 5-B) For further detail on assembly, see parts manual.
5. Connect bottom of control rod to OUTER side of lever on the torque arm using the fastener assembly (see Figure 5-C).
6. Run the clutch cable through the guide hole in the handle bracket support bar located at rear of the deck (see Figure 4).
7. Attach end of cable to the "S" hook located on the belt idler pulley.
8. (Honda Engines Only) Connect the throttle cable by attaching the throttle spring to the throttle/clutch control lever. (see Figure 4)



Figures 4



Figures 5

Operating Instructions

AERATION TIPS

Should I water before aerating?

Best aerating condition is a soft and moist ground. If you are unsure of the ground conditions, as in soil with high clay content, a simple test will determine whether it is necessary to water before aerating. Using a garden hand spade or a large screw driver, you should be able to drive the tool in the ground 2 to 3 inches with little effort. If you are unable to do so, then watering the lawn a day before aerating is necessary.

When should I use the removalole weights?

Soil conditions will dictate whether extra machine weight is needed for effective coring action. The weights are provided to give you added control, and greater tine penetration.

BEFORE YOU START

1. Make sure that engine oil is at engine manufacturer's recommended level (refer to engine manual). Be sure gear reduction oil is at engine manufacturer's recommended level. Make sure the machine is level when filling with oil.
2. With the folding handle in its operating position, lock the handle cam lock (Models 424 & 530A only).
3. Rear wheel control handle must be pulled up so rear wheels are all the way down.
4 Insert weights if needed.
5. Be sure handle is properly mounted.

> ⚠ **CAUTION!**
> **Be sure clutch cable is routed properly.**

6. Test clutch handle to insure clutch releases freely.
7. The engine top speed is preset by the engine manufacturer. Consult the engine manufacturer's manual for directions to adjust the governor and carburetor if speed is not within correct range.
8. 742 Honda Engines Only: The throttle cable has been installed by the factory, however throttle spring needs to be connected to throttle/clutch control lever (see Figure 4).

AERATING

1. Start engine and adjust throttle setting to provide a comfortable walking speed and maintain control of the equipment at all times.
2. Adjust depth control knob (see Figure 1 or 2) to desired depth. Coring depth decreases by turning the knob clockwise.
   NOTE: by raising the rear wheels all the way up (to obtain maximum coring depth) you will reduce the unit's stability but increase length of core.
3. Push down the rear wheel control handle to lower aerating tines into the ground (rear wheels will rise).
4. Push down on handle bar for better tine penetration and maneuverability (front wheel will rise).
5. Engage clutch control.
6. Adjust engine throttle setting, if needed, for comfortable speed.
7. To stop, release clutch control.

> ⚠ **CAUTION!**
> **NEVER cross hard objects or surfaces (sidewalks, driveways, stepping stones, etc.) with tines down.**

Operating Instructions

THROTTLE CABLE ADJUSTMENT.
Model 742 (Honda Engine Only)

1. Start engine and allow it to reach operating temperature.
2. Adjust the throttle cable at the adjuster bracket by turning the adjuster nut. Tightening will increase engine speed, loosening will reduce engine speed.

NOTE: A properly adjusted throttle will slightly increase engine speed as the clutch engages.
- If the clutch engages too soon, the engine will stall.
- If the engine speed is too high, the gradual controlled start is lost.

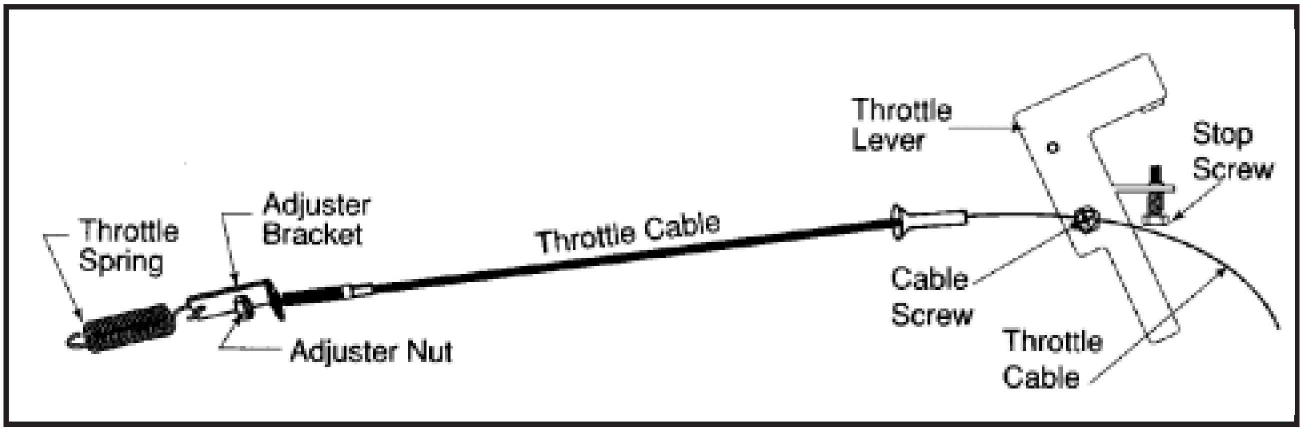


Figure 6

REAR WHEEL ADJUSTMENT

The rear wheel depth/stability control knob (see Figure 7) allows adjustment for better stability and maneuverability by turning knob clockwise. Adjusting for depth by turning knob counter clockwise determines the length of the cores pulled in the following ways:

(A) The rear wheels can be adjusted to the level you desire so you can control the penetrationof the tines to within a fraction of an inch. The length of the cores pulled can be controlled accordingly.

(B) With the rear wheels adjusted to the full up position, you will obtain maximum tine penetration. Pushing down on the machine's handle bars will put most of the weight of the machine on the tines. In this configuration you will pull the longest cores. (Front wheel will rise).



Figure 7

Operating Instructions

NOTE: Adjusting for greater stability will shorten the length of the cores you pull. You will gain greater side-to-side stability (see below "Operating on Hills." Adjustments for greater stability will also improve maneuverability during aeration.)

TURNING AND MANEUVERING THE AERATOR

Gradual maneuvering while aerating can be accomplished by simply guiding the machine. We recommend that you adjust your engine's speed control to allow for a comfortable walking speed. This will also help you maintain complete control while working in tight spaces. Adjusting for more stability (with the rear wheels lowered, reducing tine penetration) will make turning easier.
When reversing direction or making sharp turns two methods of turning can be used. Select the safest and most comfortable method for the conditions you face:

(A) Release clutch control handle, pull up rear wheel control handle, then pivot machine on rear wheels to turn.
(B) Release clutch control handle, lift handle bar and pivot machine on front wheel.

WARNING!
This method is NOT recommended when operating on hills. (See next section.)

OPERATING ON HILLS

WARNING!
DO NOT operate on hills exceeding 35% grade.

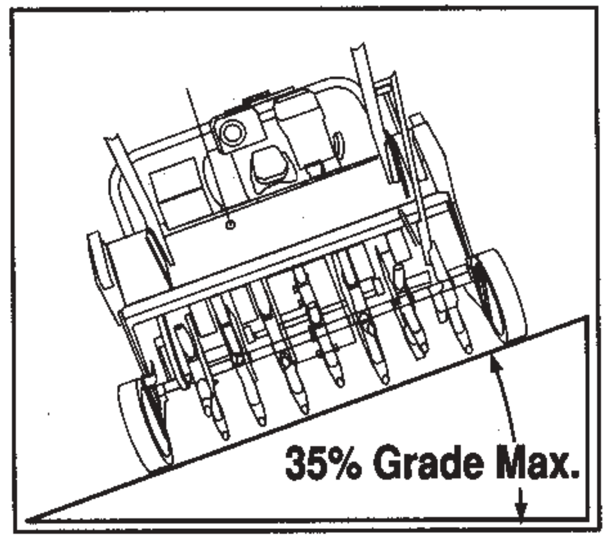


Figure 8

This unit is not designed to be used on steep slopes. Be aware that when operating on hills the
tilt of the aerator will cause the machine's center of gravity to shift to the downhill side of the machine. Under these circumstances you may experience:

(A) The need to exert a greater effort to steer and maintain the balance of the machine.
(B) Uneven tine penetration, when operating across a hill. Due to the shifted center of gravity
the downhill tines will penetrate to the maximum depth, while uphill tines may not.

WARNING!
In extreme situations (very steep hills) the machine may be so unbalanced, that it may present the danger of rolling over.

Operating Instructions

When operating on hills you should consider the following:

(A) Operate the machine up and down the hills rather than across them.
(B) Use the rear wheel depth/stability control knob to set the rear wheels for extra stability. This can be a great benefit when you do choose to run the aerator across a hill. An added benefit of using the rear wheel depth control when aerating across a hill is that you will improve the consistency of the cores pulled from the uphill tines when compared to those pulled by the downhill tines.
(C) Removing the downhill weight reduces roll-over risk and maintains consistent core plug length. (See Figure 9)
(D) Remove remaining weight from downhill side to uphill side after each pass when operating across hills.

> **⚠ WARNING!**
> **NEVER disengage tines from ground when travelling up or down hill. ONLY disengage on flat surface.**



Figure 9

TRANSPORTING THE BLUEBIRD AERATOR

MODEL 424

The BlueBird 424 Aerator has three convenient features to assist you in transporting the unit in your pick-up truck, van and even in some car trunks. Those features are: removable weights, a folding handle and convenient lifting handles on the sides of the machine. The features are provided for your optional use and can be of great benefit when required.

Removable Weights

- Unlatch weight locks.
- Grab weight handles and pull the weights from the machine.

Note: Weight 36 lb/16 kg each.

Folding Handle

- Release handle cam lock.
- Fold handle forward over the engine until it is resting on the engine guard.

Lifting Handles

Lifting handles are located on both sides of the aerator, to allow two people to lift the unit.

> **⚠ CAUTION!**
> **Avoid back or muscle injury! Use safe lifting techniques, DO NOT exceed your physical limitatons. DO NOT attempt to lift ALONE. Weight 193 lb/88 kg w/o weights.**

MODELS 530A AND 742

The removable weights are for side hill stability and tine penetration as applicable.

> **⚠ CAUTION!**
> **DO NOT lift aerators.**

With the weights in place, these models are designed for easy loading and unloading on ramps and trailers. The treaded front wheel provides increased control during transport. Use engine power to load unit.

Maintenance and Service Instructions

CLEANING AND WASHING

Regular cleaning, washing and lubricating will prolong the service of your machine.

NOTE: Use care with power washers to avoid damage to Warning Decals, Operator Instruction Labels, Bearings,Chain and Engine. Limit direct spray on these items.

DO NOT EXCEED 1000 PSI WATER PRESSURE FOR CLEANING

TWO MINUTE WARNING

Aerators may be tipped on their engine guard for cleaning and access for **no more than 2 minutes.** Engine damage may result from gasoline draining into the crankcase if prolonged. See engine manufacturers operating and maintenance instructions.

STORAGE

1. Refer to engine manufacturers instructions for engine storage information.
2 Clean machine.
3. Cover all scratches with touch up paint.
4. Lubricate according to Lubrication Schedule.
5. Lightly oil or mil board tines to inhibit rust.
6. Store unit with machine in transport position.
7. Handle may be folded.
8. Covered or indoor storage is recommended.

PREVENTATIVE MAINTENANCE SCHEDULE

A) Inspection Schedule

Item	Out of Box	First 5 hrs.	Every 10 hrs	Each Use
• Engine Oil	•			
• Gear box oil	•			
• Engine air cleaner	•			
• Clutch & cable	•			•
• Chain tension	•	•	•	
• Belt wear & tension	•			•
• Tine wear & condition	•			•
• Fasteners	•		•	
• Sprockets & set screws	•		•	
• Frame condition	•		•	
• Decals	•			•

B) Lubrication Schedule

Item	Lubricant	Every 20 hrs	Every 60 hrs	As Required	Storage
• Engine	Oil, see engine Owner's manual			•	
• GearBox	Oil, see engine Owner's manual			•	
• Rear wheels	Lithium based grease		•	•	•
• Chain	Graphite dry lubricant (Aerosol)			•	•
• Tines	Light machine oil				•
• Linkage	30W oil	•(*)			•

(*) after each pressure wash or steam cleaning

Maintenance and Service Instructions

TINE WEAR

After your BlueBird Aerator has been used for sometime, the tines will wear. When this happens their aerating performance will diminish. Inspect tines using the drawing, replace when at minimum length or before. (Tines are 5” when new.)

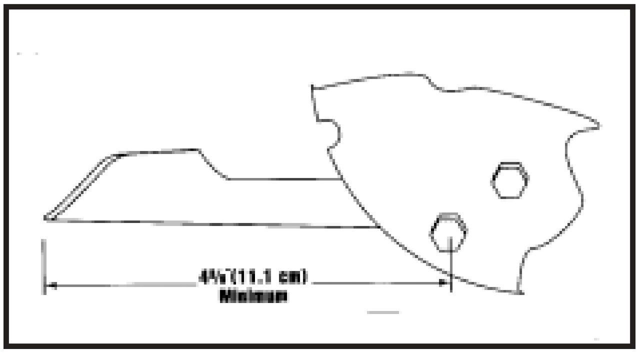


Figure 10

ENGINE SERVICE AND MAINTENANCE

Follow the engine manufacturers maintenance instructions. Should any malfunction occur with the engine during the warranty period, take it to an Authorized Service Dealer. DO NOT tear down the engine, as this may void the Engine Manufacturers Warranty.

NOTE: Refer to engine manufacturers owners manual for all engine service information.

DRIVE TRAIN

Engine, Removal and Replacement

1. Remove weights for access.
2. Remove drive guard.
3. Remove V-Belt.
4. Remove engine bolts.
5. Lift engine from unit.

NOTE: Model 742 aerators equipped with optional Honda engines have 2 pairs of shim plates under the engine.

6. Remove and retain V-pulley and key.
7. Replacement procedure opposite of removal.
8. Adjust drive belt and align V-pulley, see following section.

Drive Belt Replacement and Adjustment

1. Turn off engine and remove the drive guard cover.
2. Remove V-belt.
3. Inspect condition of V-pulleys and replace if necessary.
4. Check V-pulley alignment by looking down the belt with clutch engaged. Be sure both V-pulleys are directly in line with each other. Correct their alignment if they are not.
5. Install new belt over small V-pulley first, then over the large V-pulley. (see Figure 11).



Figure 11

NOTE: Many parts including the drive belt on your BlueBird Aerator are made specificlly for Husqvarna to give many hours of use. Replace all parts with genuine BlueBird parts to obtain maximum performance and life.

6. Insure V-belt is inside both keeper arms.
7. Check that the V-belt clears the top belt keeper arm when idler is pulled tight.
   Check that the aerator rolls freely (with handle folded on Models 424 and 530A), with the belt slack. Adjust the keeper, or clutch cable length if necessary.
8. For clutch adjustments refer to next section (Clutch Cable Removal and Replacement).
9. Replace drive guard.

Maintenance and Service Instructions

Clutch Cable Removal and Replacement

1. Turn off engine and remove old clutch cable.
2. Route new cable through the hole at the rear of housing.
3. Attach clutch cable to the bracket on the spring on the idler assembly, then connect opposite end of cable to the S hook.
4. Adjust cable to obtain ¾" to1 ¼" extension of the clutch spring when clutch is engaged. (see Figure 12).

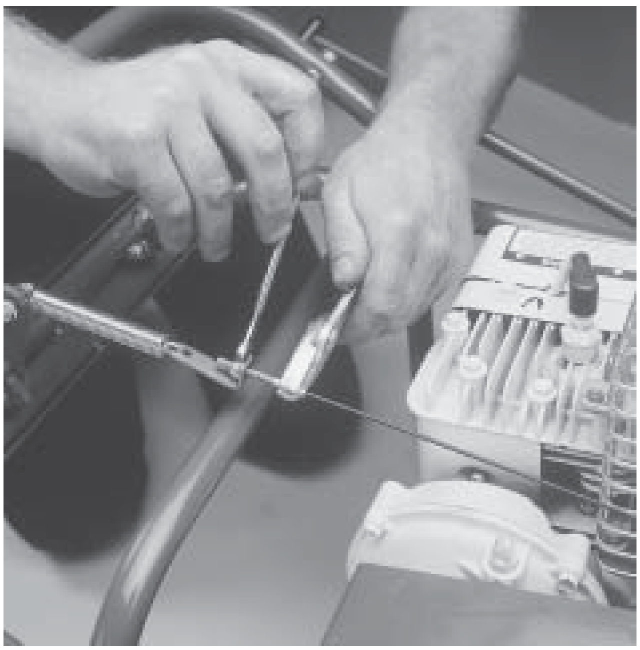


Figure 12

Throttle Cable Removal and Replacement:

Model 742 Honda Engine Only

1. Before removing your old cable measure the amount of cable extending past the cable screw.
2. Remove the old throttle cable and route the new cable through the guide hole at the rear of the housing.
3. Insert the new cable through the cable screw to the measurement obtained in step 1 and tighten. This is only an approximate setting, some additional adjustment may be required, see page 12 for cable adjustment.
4. Attach the new adjuster bracket to the spring on the throttle/clutch lever.

NOTE: As the cable length increases between the cable screw and adjuster nut the engine speed decreases. If engine speeds too low, the engine will stall as the clutch engages. As the cable length decreases between the cable screw and adjuster nut, the engine speed will increase. If engine speed is too high, the controlled start will be lost.

Chain Removal and Replacement

1. Turn off engine.
2. Remove the drive guard.
3. Loosen chain idler adjustment bolt and lock nut.
4. Remove master link and remove chain.
5. Inspect and align sprockets. (see Figure 13). Check set screws. (Double set screws for wheel and rotor sprocket).

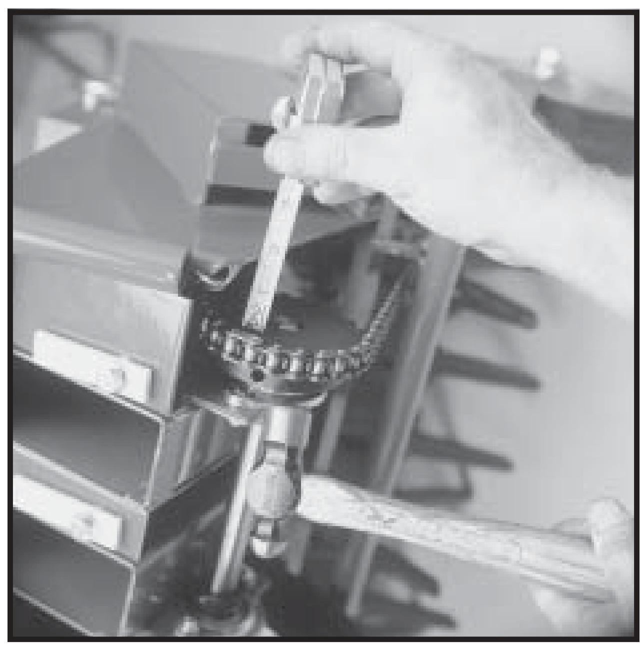


Figure 13

6. Install new chain from top (drive sprocket side) and route in accordance with Figure 14.

NOTE: Chain is most easily connected just behind the fiont drive wheel sprocket.

7. Install master link with pin plate on engine side of chain with keeper plate installed on outboard side. Install clip with split to front of machine.

Maintenance and Service Instructions

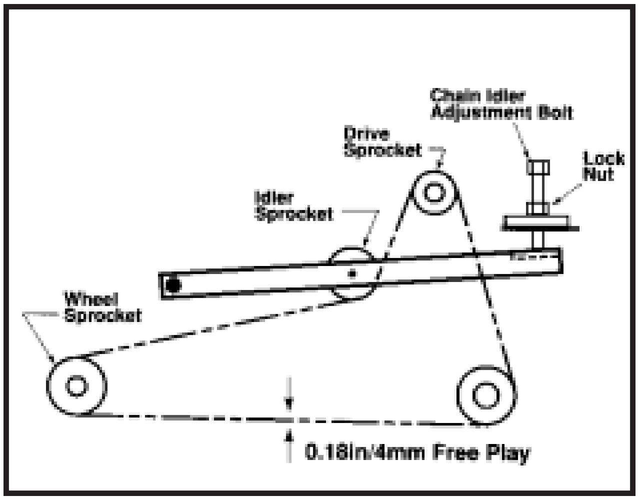


Figure 14

Adjusting Chain Tension

1. Turn engine off.
2. Remove drive guard, loosen lock nut on idler adjustment bolt.
3. Turn idler adjustment bolt to adjust tension to allow 1/8" to 1/4" movement at the center point between the wheel sprocket and the rotor sprocket (see Figures 14 and 15).
4. Tighten lock nut.

NOTE: Husqvarna recommends the replacement of sprockets when replacing drive chain.



Figure 15

HANDLE - MODEL 424 and 530A ONLY

Inspection

1. The handle cam lock must lock shut under moderately heavy hand pressure. Handle frame should be tightly secured to the aerator body.
2. Check the cam rod lock nut. If it turns freely by hand when cam is released, the locking strength of the nut has been relieved and the nut must be replaced to maintain the security of the lock.

Adjustment

With the handle in the operating position, slowly tighten the cam rod lock nut (1/4 turn at a time) until the cam handle locks with moderately heavy hand pressure.

IMPORTANT: excessive adjustment of the lock nut will damage the cam rod. ALWAYS replace a free spinning nut to avoid unwanted loosening of the handle. For smooth operation of the cam, apply a small amount of grease on the cam edge.

WHEELS

1. Turn off engine and empty all fuel from the fuel tank.
2. Remove weights and drive guard.
3. Loosen the lock nut on adjustment screw to loosen the chain. Remove master link and chain.
4. Tip the front end up to let the aerator rest on its handle. The front wheel will be approximately 1 foot off the ground.

> ⚠ **CAUTION!**
>
> **Secure handle to prrevent aerator from tipping.**

5. Remove the wheel shaft bearing bolts (4 on the 424 and 530A and 6 on the 742).
6. Remove the wheel axle assembly.

Drive Wheel Shaft Removal and Replacement

7. Pull sprocket and bearing from shaft. NOTE: Sprocket is double set screwed. To remove the bearings, you must first remove the collar by loosening the set screw, then insert pin punch into the hole next to the set screw and, using a hammer, with moderate striking, hit

collar so that it rotates in the opposite direction the wheel would normally turn. If bearings are rusted in place they will have to be replaced along with the wheel and shaft.

8. Install bearings and sprocket loosely onto the shaft. Models 424 & 530A: hub side away from wheels. Model 742 has 3 bearings. Wheel bearings should have hubs facing away from wheel. Wheel shaft bearing should have hub facing away from sprocket.
9. Bolt bearings into place.
10. Center the wheels between the wheel opening and the housing. Lock the collars in place and tighten set screws.
11. Align and tighten the sprocket (there are double set screws stacked two in each hole) use blue loctite with the key in place.
12. Replace the chain following procedures in section “Chain Removal and Replacement.(see page 17).
13. Adjust chain per section “Adjusting Chain Tension” and replace drive guard. (see page 18).

Rear Wheel Removal and Replacement: Models 424 & 530A

1. Make sure unit is on level ground and engine is turned off.
2. Lower the rear wheel control handle to let the aerator rest on the tines.
3. Turn the rear wheel depth/stability control knob to adjust the rear wheels for minimum depth clockwise (more stability).
4. Remove the axle nut. Pull the axle bolt, then the wheel from the wheel carriage.
5. Install a new wheel with grease fitting facing out, with seals carefully in place on the wheel bushing.Insert axle bolt through wheel and wheel lift frame. Use washer and lock nut, tighten firmly.
6. Grease wheel bearings.

Rear Wheel Removal and Replacement: Model 742

1. Make sure unit is on level ground and the engine is shut off.
2. Lower the rear wheel control handle to let the aerator rest on the tines.
3. Turn the rear wheel depth/stability control knob to adjust the rear wheels for minimum depth clockwise for more stability.
4. Remove the hairpin cotter pin. (see Figure 16)
5. Slide the wheel assembly off the machine. (see Figure 16)
6. Install hairpin cotter pin into the axle when removed to prevent loss.

Removable Wheel - Model 742 Only

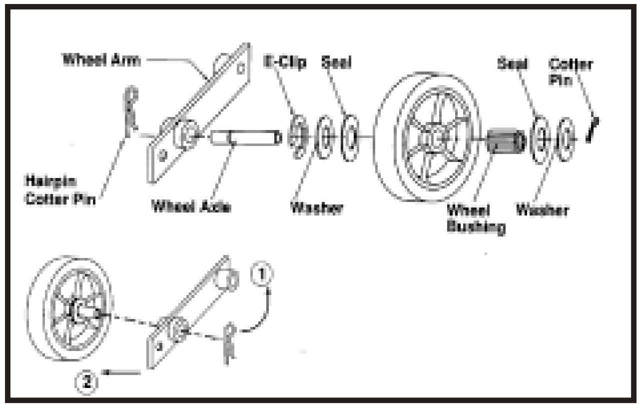


Figure 16

TINE AND TINE SHAFT

Tine Replacement

1. Turn off engine and remove weights.
2. Fold handle on the 424 and 530A Models.
3. Place on workbench (Model 424 only) and chock wheels.
3. Note direction of tine bolt. **Reinstall the bolt facing in the same direction on the Model 424 to avoid contact with weights.**
4. Remove and replace tines by loosening stop bolt. Remove retaining bolt and old tine, insert new tine and fasten with retaining bolt in the same direction as it was removed. When all tines are replaced, tighten stop bolts.

NOTE: Replace worn lock nuts to insure that bolts will hold tines in place.

Tine Shaft Bearing Removal and Replacement

1. Turn off engine and remove weights.
2. Remove drive guard cover.
3. Fold handle for better access to tines (on Models 424 & 530A only).
4. Elevate approximately 4", block and chock rear wheels.
5. Manually cycle the drive chain for acess to master link.
6. Turn chain idler adjustment screw counter clockwise to loosen the chain.
7. Remove the master link and free rotor sprocket.

8. Remove the tine rotor shaft bearing bolts (4).
9. Remove chain scaper bolts (2) and chain scraper (on Model 424 only).
10. Remove the rotor shaft assembly.
11. Remove outer rotor bearing by loosening the set screw in the collar.

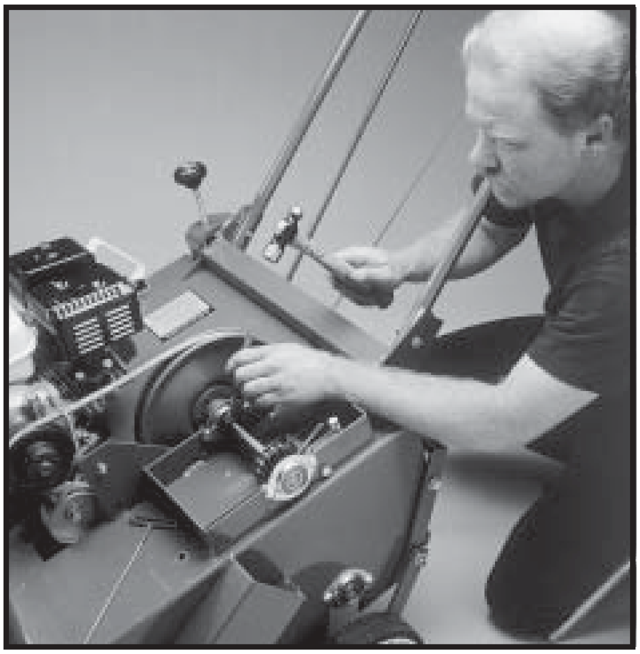


Figure 17

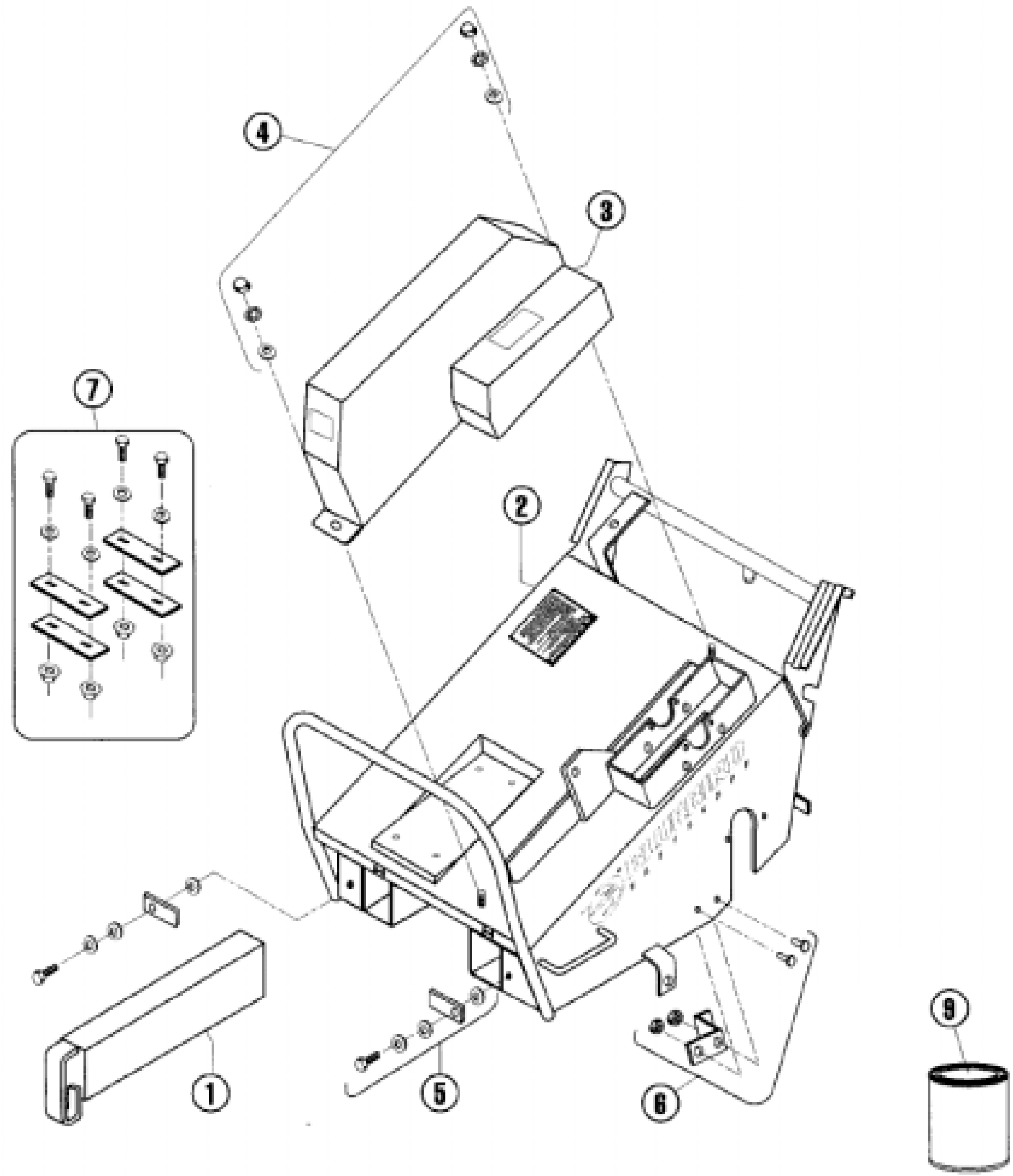
12. Unlock collar (best accomplished by using a hammer and pin punch). Insert pin punch intothe hole next to the set screw and, using the hammer, with moderate striking, hit collar so that it rotates in the opposite direction the rotor would normally turn.(see Figure 17)
13. Reverse these steps to reinstall.
14. Refer to sections “Chain Removal and Replacement” and “Adjusting Chain Tension” for chain replacement and adjustment of chain tension. (see page 18).

Free-Wheeling Tine Assembly Removal and Replacement

Complete steps 1 through 12 in previous section, then proceed with the following:

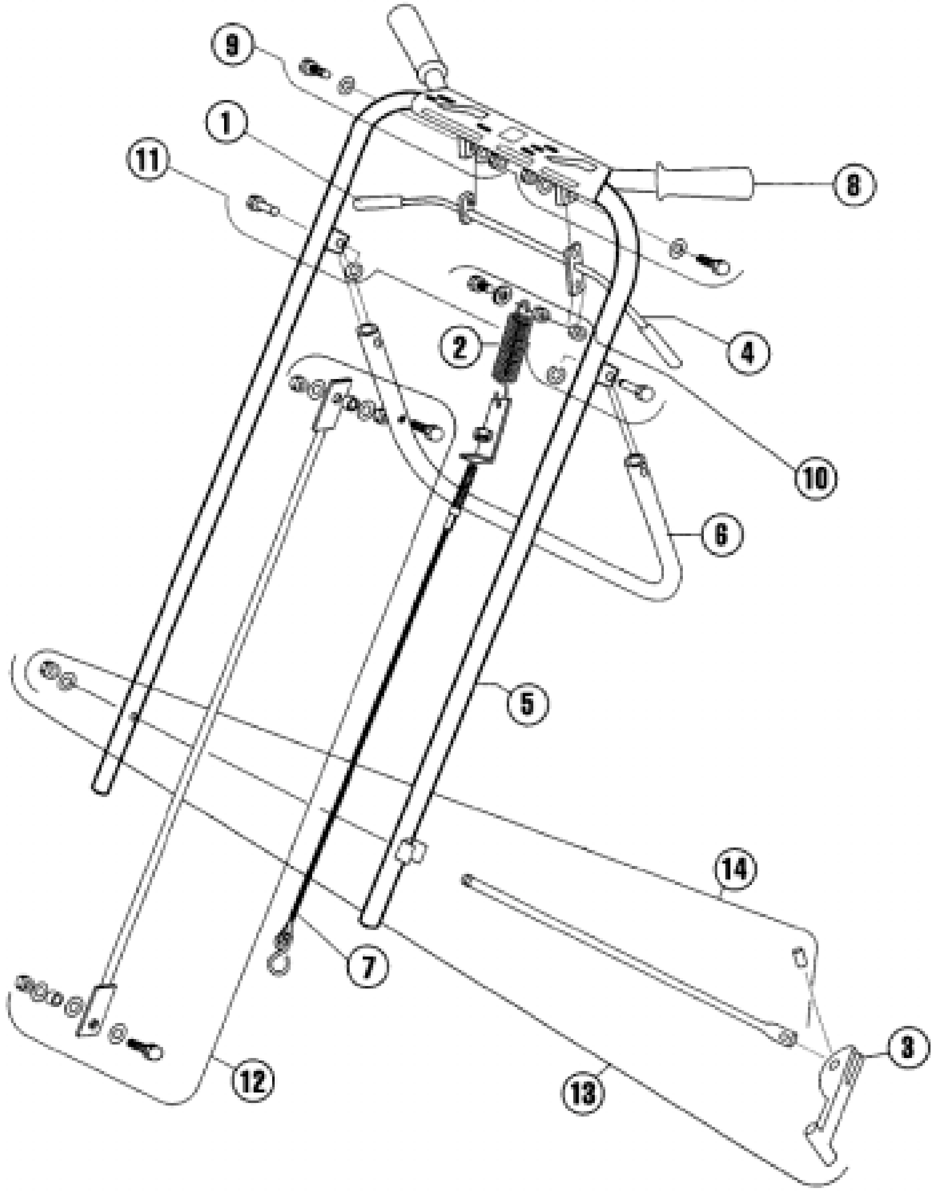
1. After the bearing is off the rotor, unlock the inner bearing that secures the tine assembly.
2. Remove outer free-wheeling tine assembly.
3. Place the new rotor assembly beside the old assembly so that you have a pattern to follow indicating the correct direction which the new tines are to be installed. You can also refer to the tines on the fixed tine assembly as an example of proper assembly.
4. Once the tines are installed on the free-wheeling assembly, re-install the inner and outer bearing assemblies on the free-wheeling assembly with the bearing hubs facing toward the fixed tines. Make sure that the inner bearing has a locking collar. Hand tighten the nuts only.
5. Slide the new free-wheeling tine assembly on the shaft making sure that the tine direction matches the direction of the fixed tine assembly. The bearing with the locking collar faces the fixed tines and butts up against the shoulder of the shaft.
6. Tighten the four nuts on the bearing assemblies.
7. Lock the bearing collar in place with the hammer and punch making sure the collar locks in the same direction as the rotation of the rotor.
8. Replace outer shaft bearing and re-install the entire rotor assembly by reversing steps 1 through 12 in previous action. Instructions are for one side. Both are procedurally identical.

Parts Main Frame - Model 424



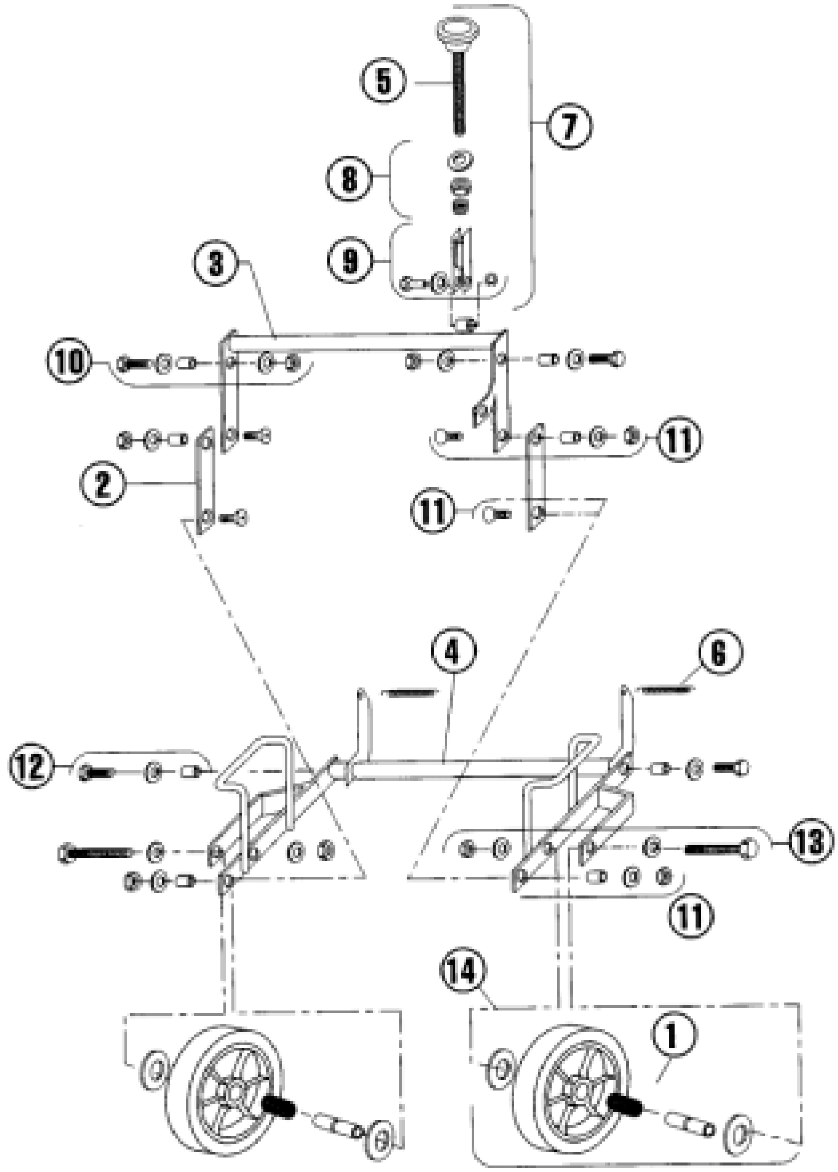
ITEM	PART NO.	QTY.	DESCRIPTION
1	7144	2	WEIGHT, 36 LBS., SOLID STEEL
2	7154	1	hOUSING W/DECALS
3	7186	1	DRIVE GUARD W/DECALS
4	7200	1	DRIVE GUARD FASTENER KIT
5	7201	2	LATCK KIT, WEIGHT W/HARDWARE
6	7202	1	SCRAPER KIT, CHAIN W/HARDWARE
7	7203	1	PLATE KIT, FOR HONDA ENGINE
9	0729		PAINT, BLUE, 1 QT.
	7227	1	DECAL KIT, 424, (NOT SHOWN)

Parts Handle and Control - Model 424



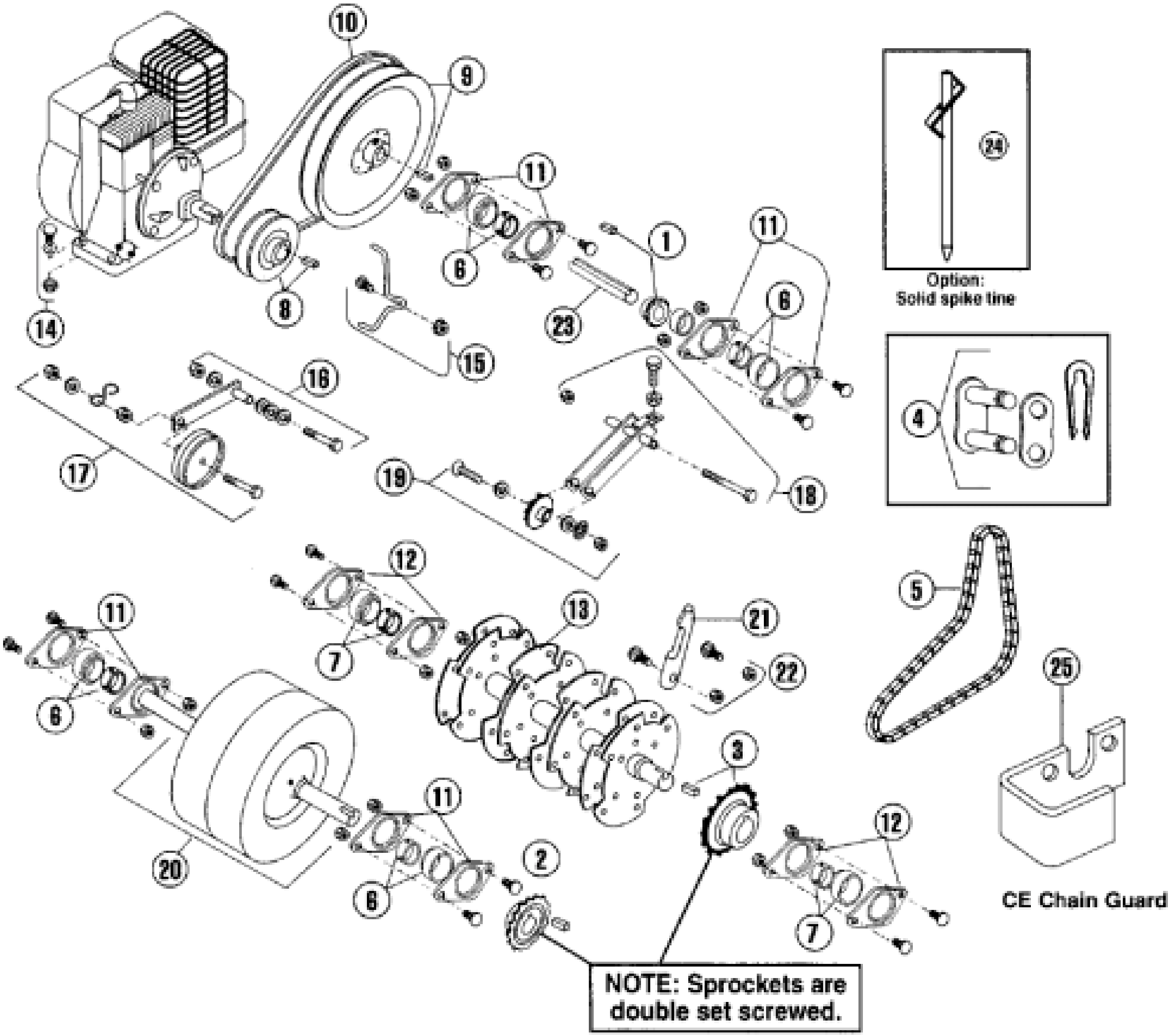
ITEM	PART NO.	QTY.	DESCRIPTION
1	0034	2	GRIP, CLUTCH
2	5129	1	SPRING, CLUTCH
3	5256	1	CAM, LOCKING
4	7149	1	CLUTCH CONTROL W/GRIPS
5	7151	1	HANDLE W/GRIPS
6	7174	1	HANDLE, CONTROL, REAR WHEEL
7	7189	1	CLUTCH CABLE
8	7191	1	GRIPS, PAIR
9	7221	1	FASTENER KIT, CLUTCH CONTROL TO HANDLE
10	7222	1	CLUTCH CABLE KIT
11	7223	1	PIN KIT, REAR WHEEL CONTROL HANDLE
12	7224	1	CONTROL ROD KIT, REAR WHEEL
13	7225	1	CAM ROD KIT, W/CAM
14	7226	1	CAM ROD KIT, WITHOUT CAM

Parts Rear Wheel - Model 424



ITEM	PART NO.	QTY.	DESCRIPTION
1	0048	2	BEARING, ROLLER W/BUSHING & SEALS
2	7107	2	LIFT LINK
3	7133	1	TORQUE ARM, DEPTH ADJUSTMENT
4	7148	1	WHEEL CARRIAGE, AXLE
5	7163	1	KNOB, DEPTH/STABILITY
6	7195	2	SPRING, AXLE
7	7213	1	CONTROL KIT, DEPTH/STABILITY
8	7214	1	KNOB SPRING KIT, DEPTH/STABILITY
9	7215	1	BRACKET KIT, DEPTH/STABILITY
10	7216	2	FASTENER KIT, TORQUE ARM/HOUSING
11	7217	4	FASTENER KIT, LINKAGE
12	7218	2	FASTENER KIT, CARRIAGE/HOUSING
13	7219	2	BOLT KIT, REAR WHEEL
14	7220	2	WHEEL KIT, REAR W/ROLLER BEARINGS, BUSHING & SEALS

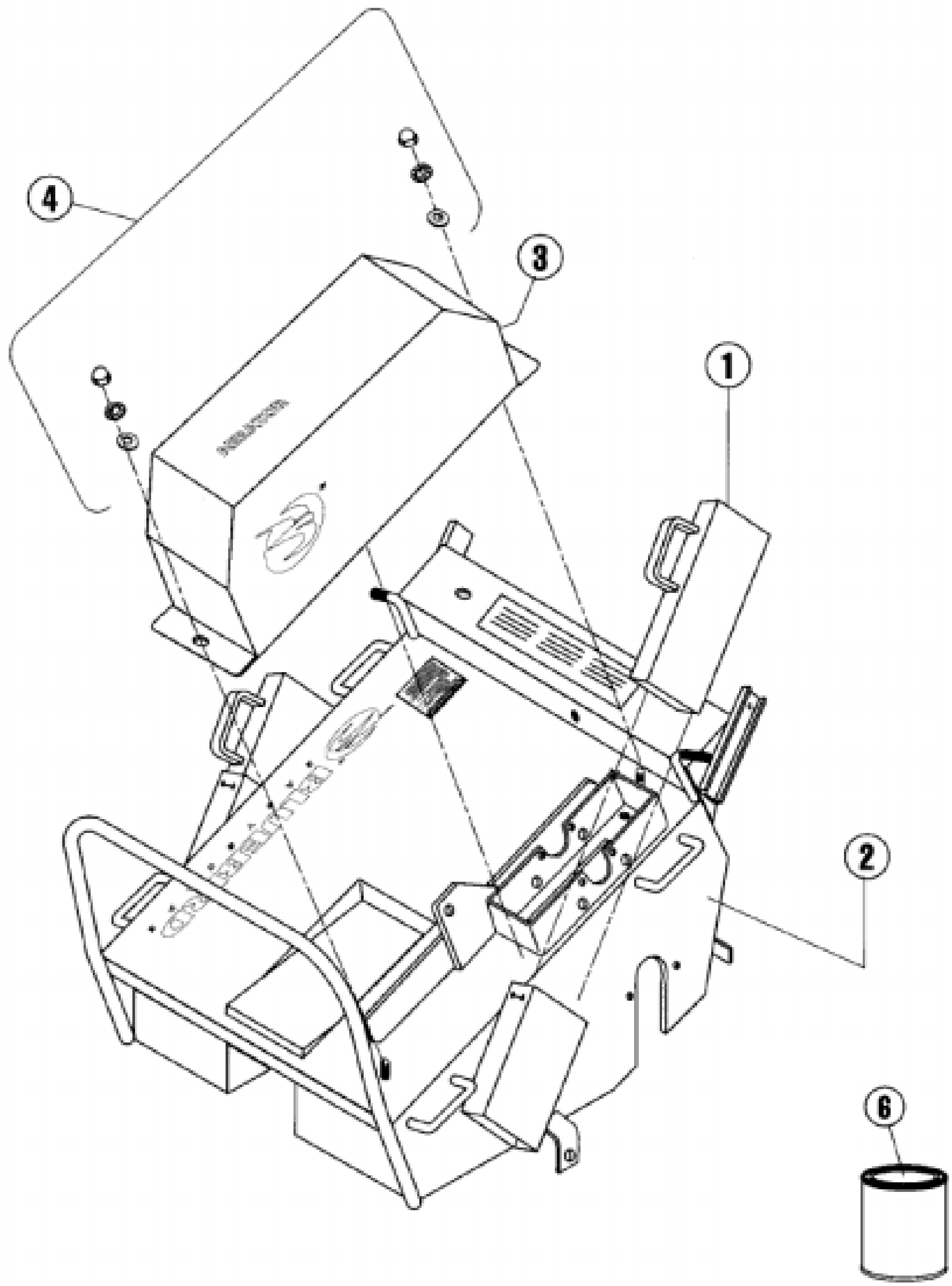
Parts Power Train & Tine Rotor - Model 424



Parts Power Train & Tine Rotor - Model 424

ITEM	PART NO.	QTY.	DESCRIPTION
1	0301	1	SPROCKET, JACKSHAFT, W/KEY & SPACER
2	0302	1	SPROCKET, WHEEL, W/SET SCREWS & KEY
3	0303	1	SPROCKET, ROTOR, W/SET SCREWS & KEY
4	0307	1	MASTER LINK FOR 0308
5	0308	1	CHAIN, #40 PERMA LUBE ROLLER
6	0315	4	BEARING, 3/4" W/LOCK COLLAR
7	0317	2	BEARING, 1" W/LOCK COLLAR
8	0328	1	V-PULLEY, A-4" W/SET SCREWS & KEY
9	0332	1	V-PULLEY, A-10" W/SET SCREWS & KEY
10	0336	1	V-BELT, A-44" SPECIAL
11	5185	4	STAMPING KIT W/FASTENERS (FOR 3/4" BEARING)
12	5786	2	STAMPING KIT W/FASTENERS (FOR 1" BEARING)
13	7157	1	ROTOR SHAFT, TINE WITHOUT BOLTS
14	7204	1	FASTENER KIT, ENGINE
15	7205	1	BELT KEEPER KIT
16	7206	1	IDLER ARM KIT, PULLEY
17	7207	1	IDLER PULLEY KIT
18	7208	1	IDLER ARM KIT, CHAIN
19	7209	1	IDLER SPROCKET KIT, CHAIN
20	7210	1	FRONT WHEEL & SHAFT KIT
21	7211	1	TINE SET, CLOSED SPOON, 24 EACH
	7112	4	TINE SET, CLOSED SPOON, 6 EACH
22	7212	1	TINE/SPIKE FASTENER KIT, 48 EA. BOLTS & NUTS
	7103	4	TINE/SPIKE FASTENER KIT, 12 EA. BOLTS & NUTS
23	7232	1	JACKSHAFT, W/KEY
24	7311	1	SPIKE SET, 24 EACH
25	7199	1	CE CHAIN GUARD (FOR EUROPEAN MODELS)

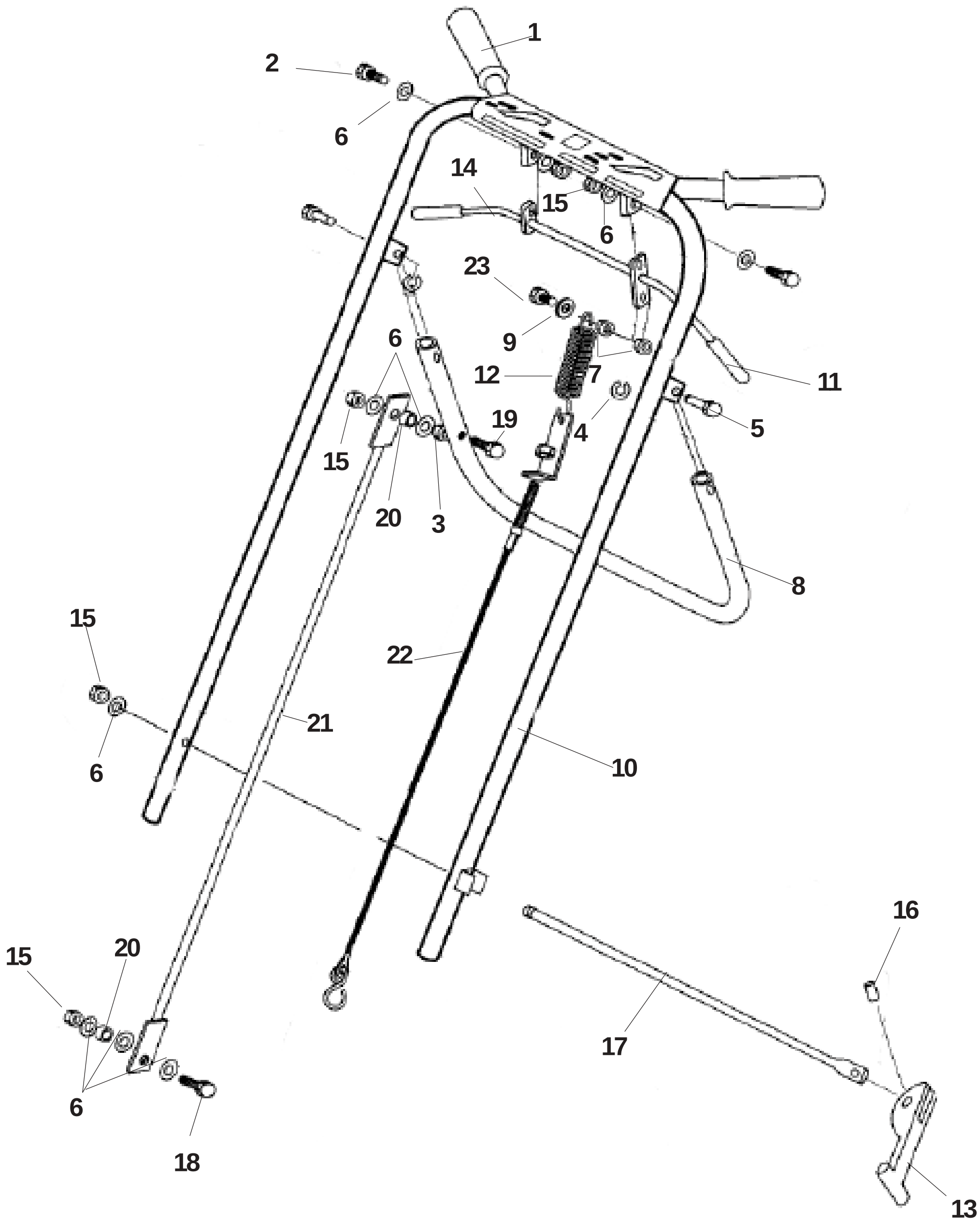
Parts Main Frame - Model 530A



Parts Main Frame - Model 530A

ITEM	PART NO.	QTY.	DESCRIPTION
1	7600	2	WEIGHT, 36 LBS., SOLID STEEL
2	7601	1	HOUSING W/DECALS
3	7602	1	DRIVE GUARD W/DECALS
4	7200	1	DRIVE GUARD FASTENER KIT
6	0729		PAINT, BLUE, 1 QT.
	7630	1	DECAL KIT, 530, (NOT SHOWN)

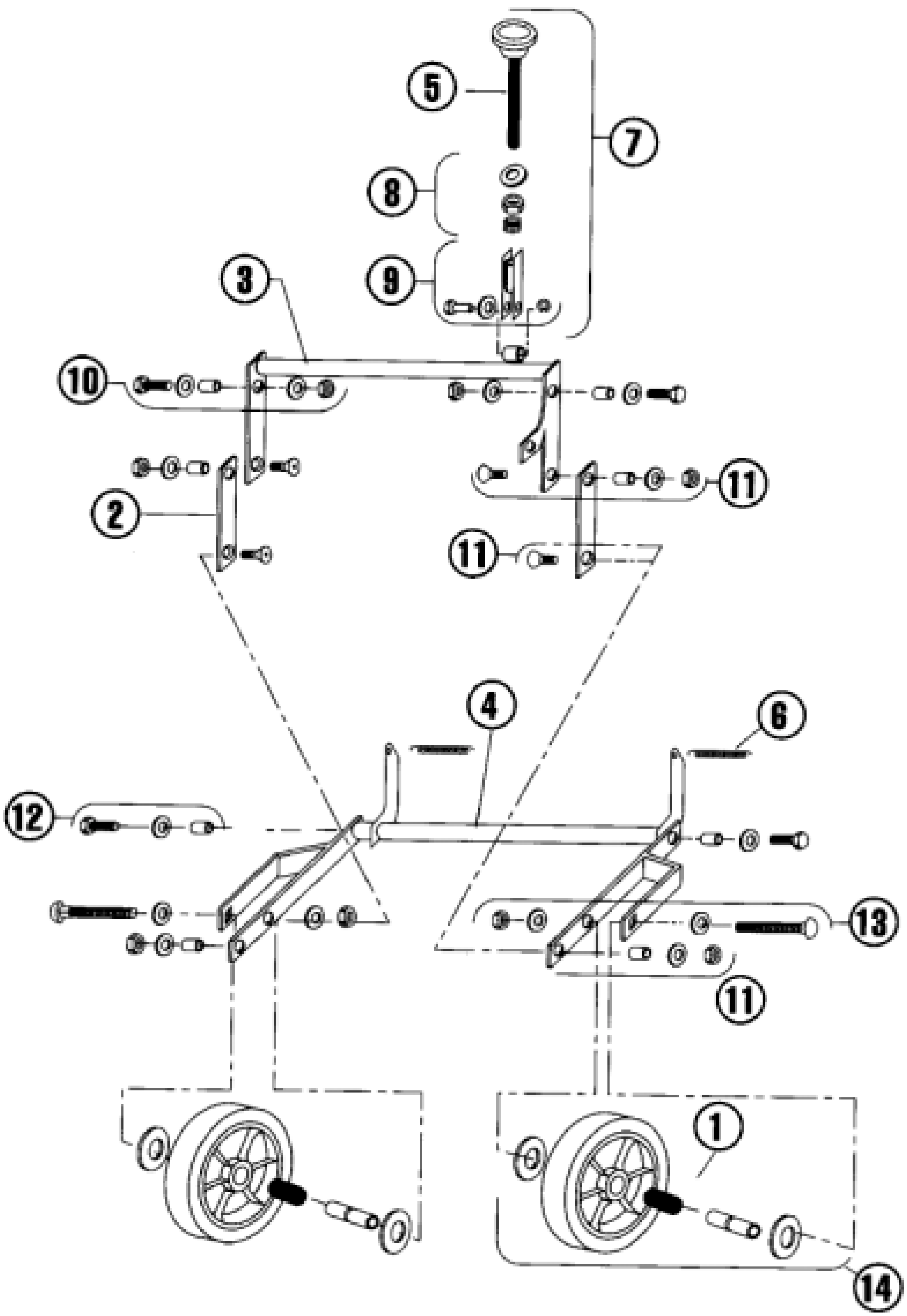
Parts Handle & Control - Model 530A



Parts Handle & Control - Model 530A

ITEM	PART NO.	QTY.	DESCRIPTION
1	0033C	2	GRIPS, PAIR
2	0143	2	SCREW, 5/16-18 X 1
3	0210	2	NUT, 5/16-18
4	0352	2	RING, RETAINING
5	03895	2	PIN, CLEVIS, 5/16 X 1.174
6	0410	9	WASHER, 5/16
7	02005	2	NUT, 10-32, FLANGE LOCK
8	200224	1	HANDLE, LOWER
9	0403	2	WASHER, #10
10	200744	1	HANDLE
11	0034	2	GRIP, CLUTCH
12	5129	1	SPRING, CLUTCH
13	5256	1	CAM, LOCKING
14	200201	1	CLUTCH CONTROL
15	0211	5	NUT, 5/16-18, LOCKING
16	0377	1	PIN, ROLL, 1/4" X 3/4"
17	12507	1	ROD
18	0144	1	SCREW, 5/16-18 X 1 1/4
19	0150	1	SCREW, 5/16-18 X 1 3/4
20	10191	2	BUSHING
21	200190	1	BAR, TRANSPORT LINK
22	7189	1	CABLE, CLUTCH ????
23	10189	1	SCREW, 10-32 X 1

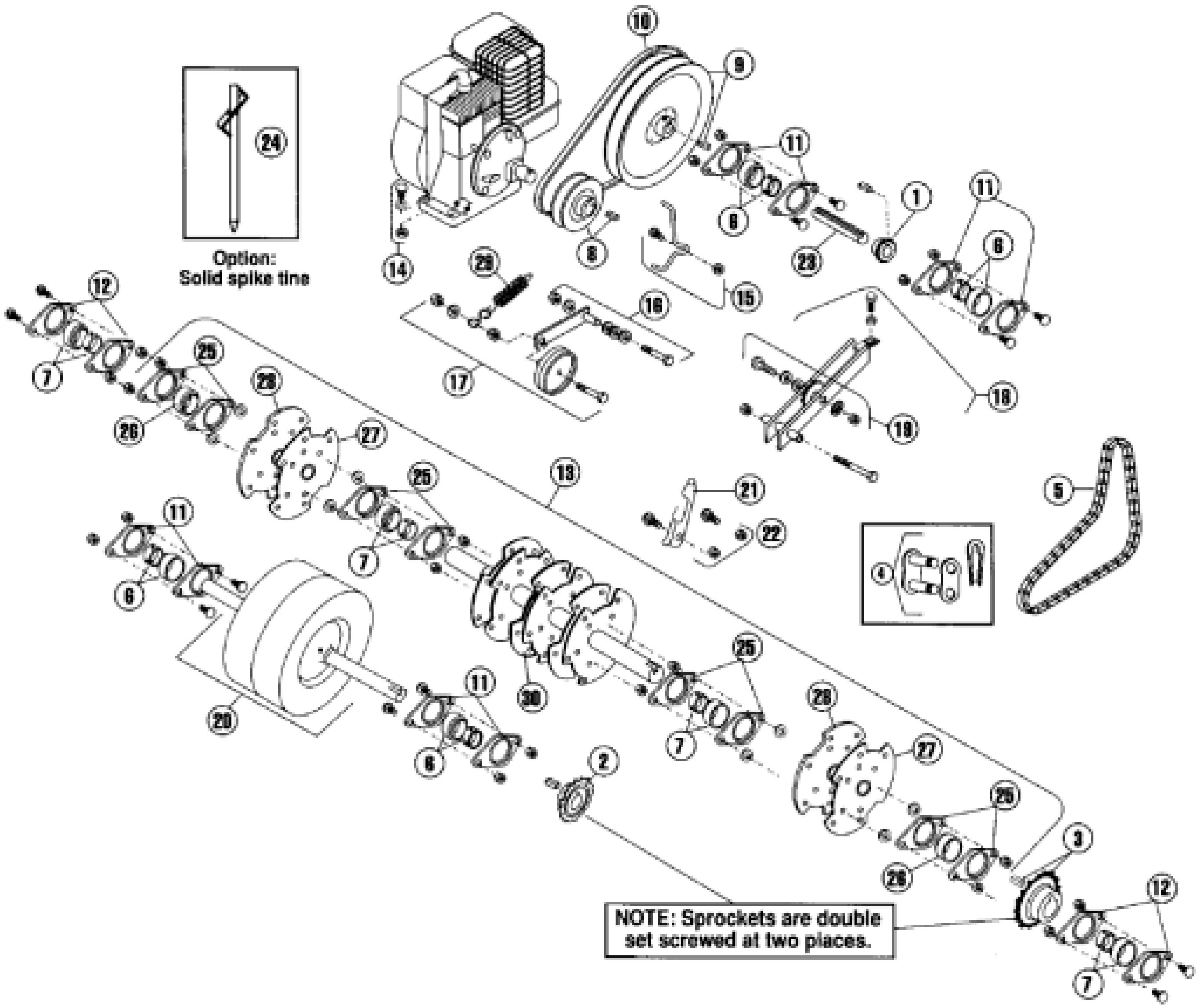
Parts Rear Wheel - Model 530A



Parts Rear Wheel - Model 530A

ITEM	PART NO.	QTY.	DESCRIPTION
1	0048	2	BEARING, ROLLER W/BUSHING & SEALS
2	7107	2	LIFT LINK
3	7133	1	TORQUE ARM, DEPTH ADJUSTMENT
4	7620	1	WHEEL CARRIAGE, AXLE
5	7163	1	KNOB, DEPTH/STABILITY
6	7195	2	SPRING, AXLE
7	7213	1	CONTROL KIT, DEPTH/STABLITILY
8	7214	1	KNOB SPRING KIT DEPTH/STABILITY
9	7215	1	BRACKET KIT, DEPTH/STABILITY
10	7216	2	FASTENER KIT, TORQUE ARM/HOUSING
11	7217	4	FASTENER KIT, LINKAGE
12	7218	2	FASTENER KIT, CARRIAGE/HOUSING
13	7621	2	BOLT KIT, REAR WHEEL
14	7220	2	WHEEL KIT, REAR, W/ROLLER BEARING, BUSHING & SEALS

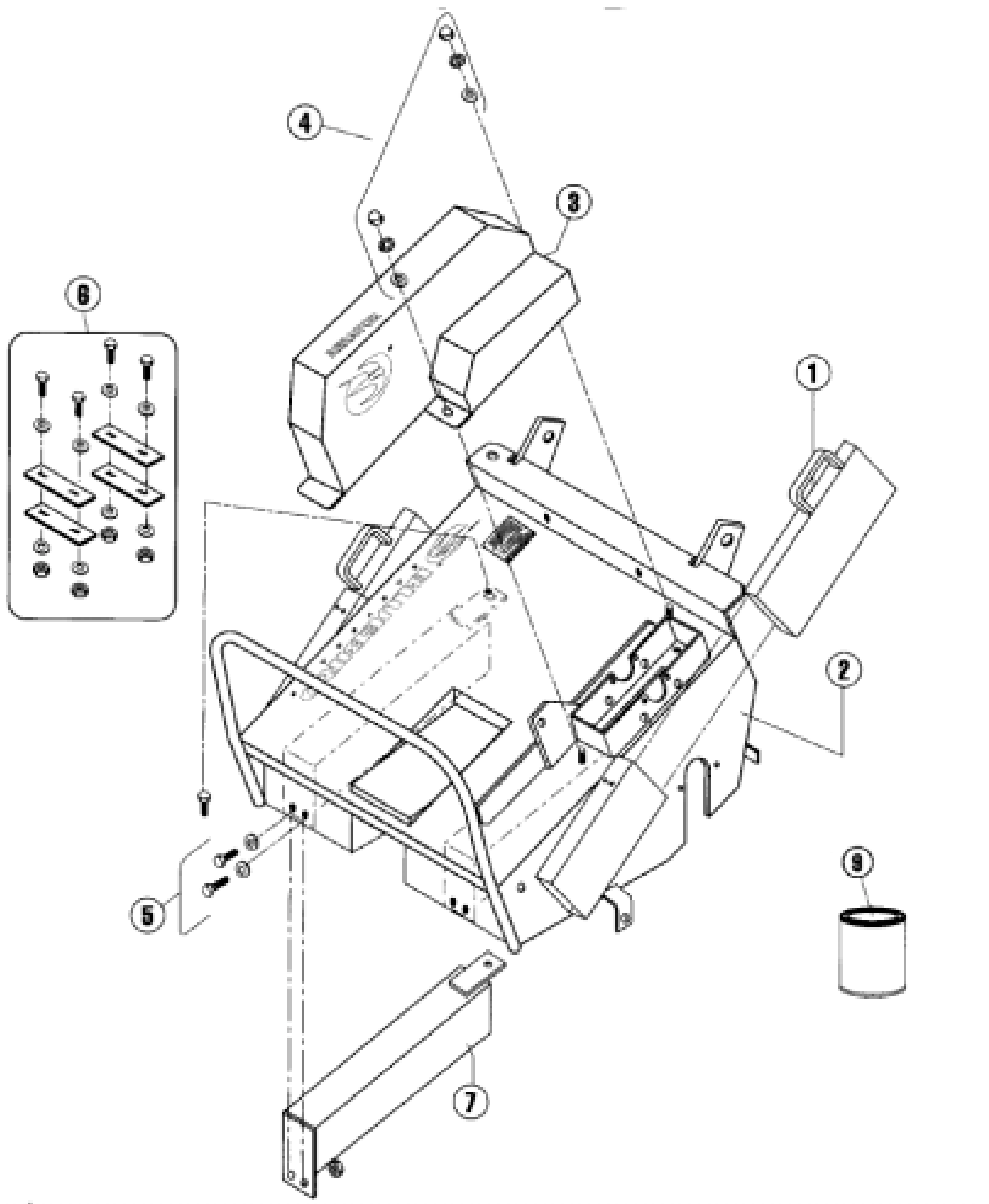
Parts Power Train & Tine Rotor - Model 530A



Parts Power Train & Tine Rotor - Model 530A

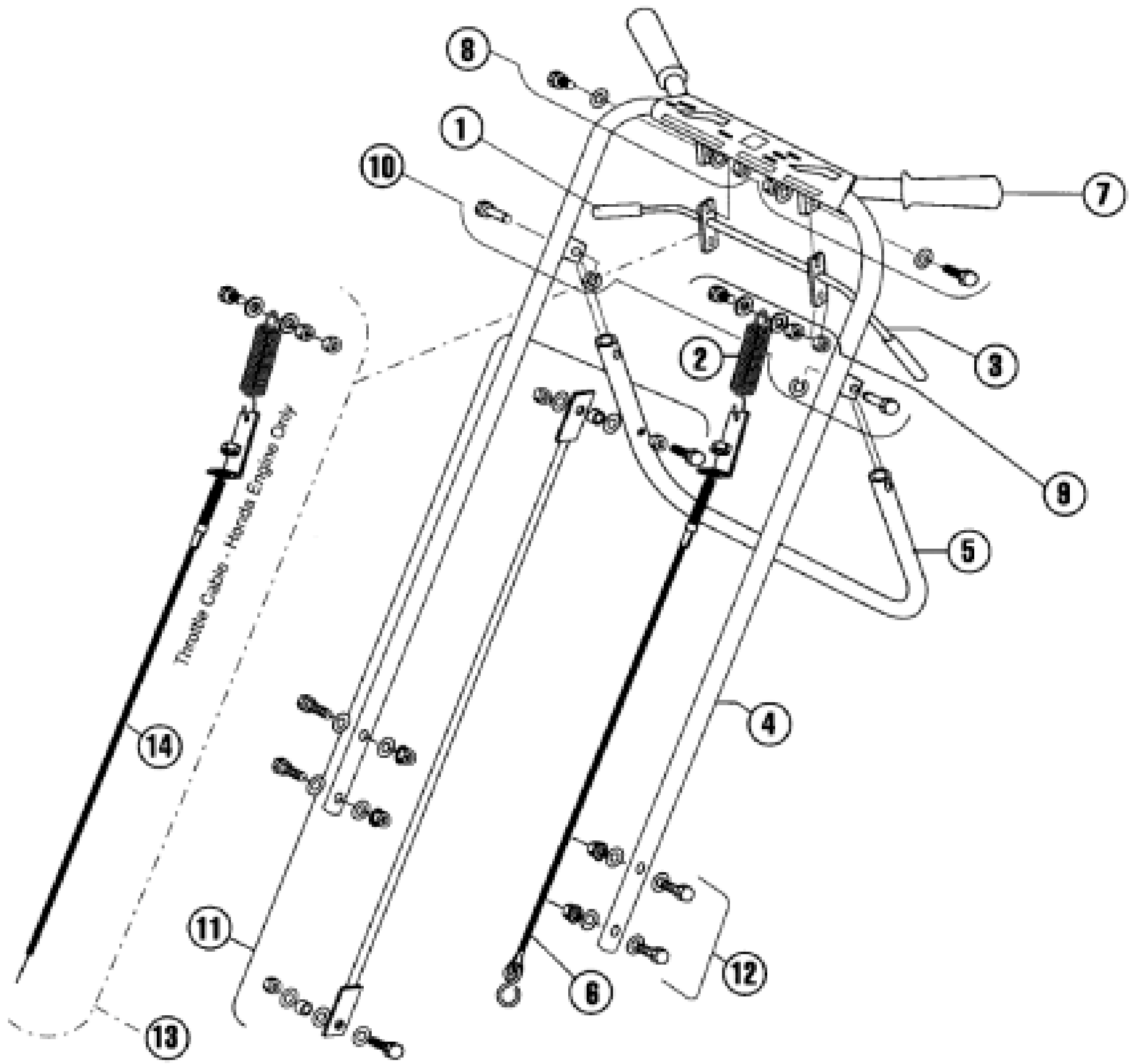
ITEM	PART NO.	QTY.	DESCRIPTION
1	7630	1	SPROCKET, JACKSHAFT, W/KEY & SPACER
2	0302	1	SPROCKET, WHEEL, W/SET SCREWS & KEY
3	0303	1	SPROCKET, ROTOR, W/SET SCREWS & KEY
4	0307	1	MASTER LINK FOR 0308
5	0308	1	CHAIN, #40 PERMA LUBE ROLLER
6	0315	4	BEARING, 3/4" W/LOCKING COLLAR
7	0317	2	BEARING, 1" W/LOCK COLLAR
8	0328	1	V-PULLEY, A-4" W/SET SCREWS & KEY
9	0332	1	V-PULLEY, A-10" W/SET SCREWS & KEY
10	0336	1	V-PULLEY, A-44" SPECIAL
11	5185	4	STAMPING KIT W/FASTENERS (FOR 3/4" BEARING)
12	5786	2	STAMPING KIT W/FASTENERS (FOR 1" BEARING)
13	7631	1	ROTOR SHAFT, TINE WITHOUT BOLTS
14	7204	1	FASTENER KIT, ENGINE
15	7205	1	BELT KEEPER KIT
16	7206	1	IDLER ARM KIT, PULLEY
17	7632	1	IDLER PULLEY KIT
18	7633	1	IDLER ARM KIT, CHAIN
19	7634	1	IDLER SPROCKET KIT, CHAIN
20	7635	1	FRONT WHEEL & SHAFT KIT
21	7636	1	TINE SET, CLOSED SPOON, 30 EACH
	7112	5	TINE SET, CLOSED SPOON, 6 EACH
22	7637	1	TINE/SPIKE FASTENER KIT, 72 EA. BOLTS & NUTS
	7103	5	TINE/SPIKE FASTENER KIT, 12 EA. BOLTS & NUTS
23	7232	1	JACKSHAFT, W/KEY
24	7638	1	SPIKE SET, 30 EACH
25	7105	4	STAMPING KIT (FOR 1" BRG.) W/NUTS & WASHERS
26	7108	2	BEARING 1" (DOES NOT INCLUDE LOCK COLLAR)
27	7639	2	LEFT ROTOR PLATE
28	7640	2	RIGHT ROTOR PLATE
29	5129	1	SPRING CLUTCH
30	7641	1	ROTOR SHAFT, CENTER

Parts Main Frame - Model 742



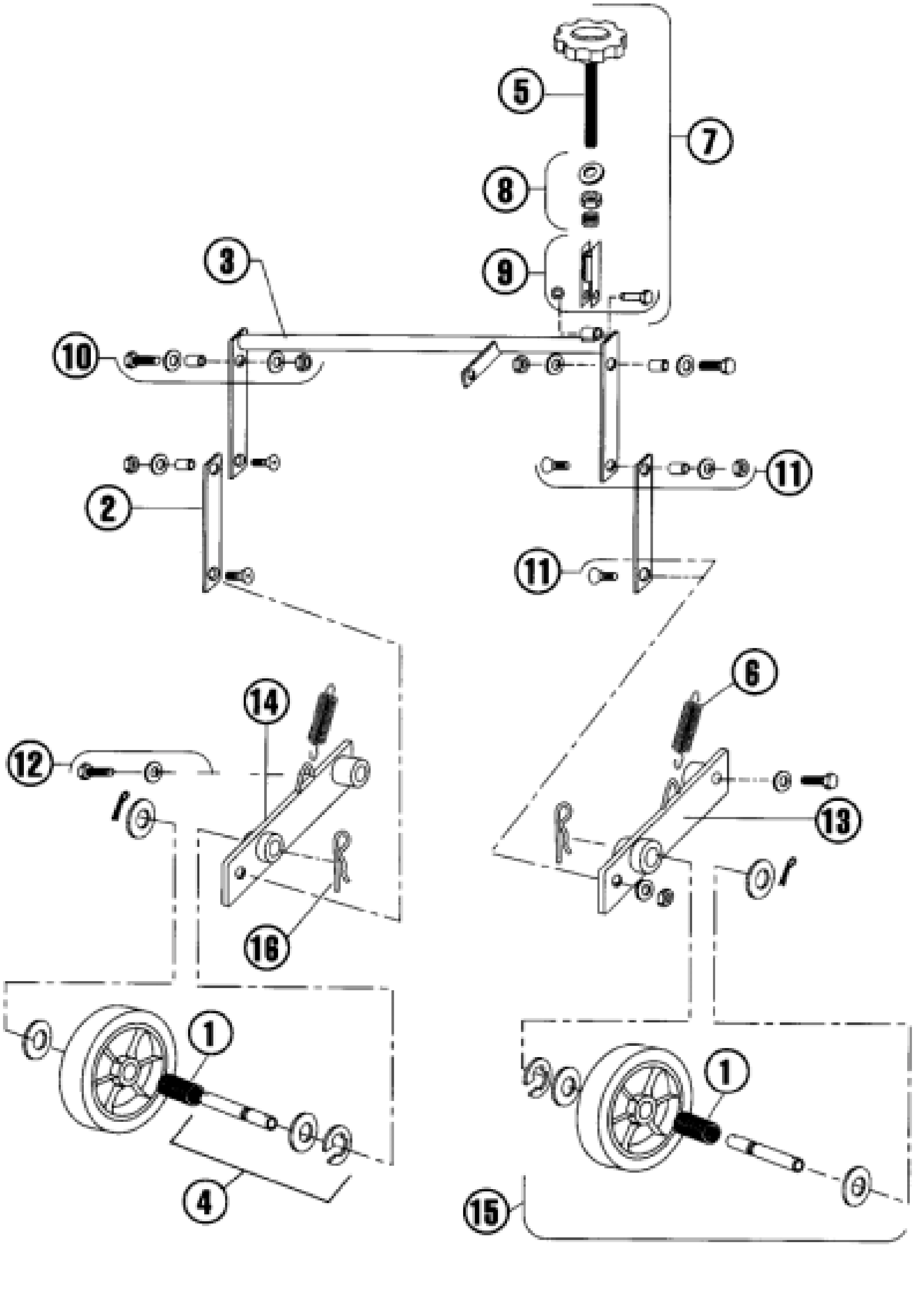
ITEM	PART NO.	QTY.	DESCRIPTION
1	7600	2	WEIGHT, 36 LBS., SOLID STEEL, REMOVABLE
2	7400	1	HOUSING W/DECALS
3	7401	1	DRIVE GUARD W/DECALS
4	7200	1	FASTENER KIT, DRIVE GUARD
5	7402	2	FASTENER KIT, WEIGHT
6	7203	1	PLATE KIT, FOR HONDA ENGINE
7	7403	2	36 LB. WEIGHT, MOUNTED
9	0729		PAINT, BLUE, 1 QT. CAN
	7404	1	DECAL KIT (NOT SHOWN)

Parts Handle & Control - Model 742



ITEM	PART NO.	QTY.	DESCRIPTION
1	0034	2	GRIP, CLUTCH, 1 EACH
2	5129	1	SPRING, CLUTCH
3	7149	1	CLUTCH CONTROL, W/GRIPS
	7405	1	CLUTCH/THROTTLE CONTROL -
			HONDA ENGINE ONLY
4	7406	1	HANDLE W/GRIPS
5	7174	1	HANDLE, CONTROL, REAR WHEEL
6	7189	1	CLUTCH CABLE
7	7191	1	GRIPS, PAIR
8	7221	1	FASTENER KIT, CLUTCH CONTROL TO HANDLE
9	7222	1	CLUTCH CABLE KIT
			(COMPLETE ASSY. EXCEPT #5129)
10	7223	1	PIN KIT, REAR WHEEL CONTROL HANDLE
11	7224	1	REAR WHEEL CONTROL ROD KIT
12	7117	2	FASTENER KIT, HANDLE
13	7407	1	THROTTLE CABLE KIT - HONDA ENG. ONLY
			(COMPLETE ASSY. EXCEPT #5129)
14	7408	1	THROTTLE CABLE

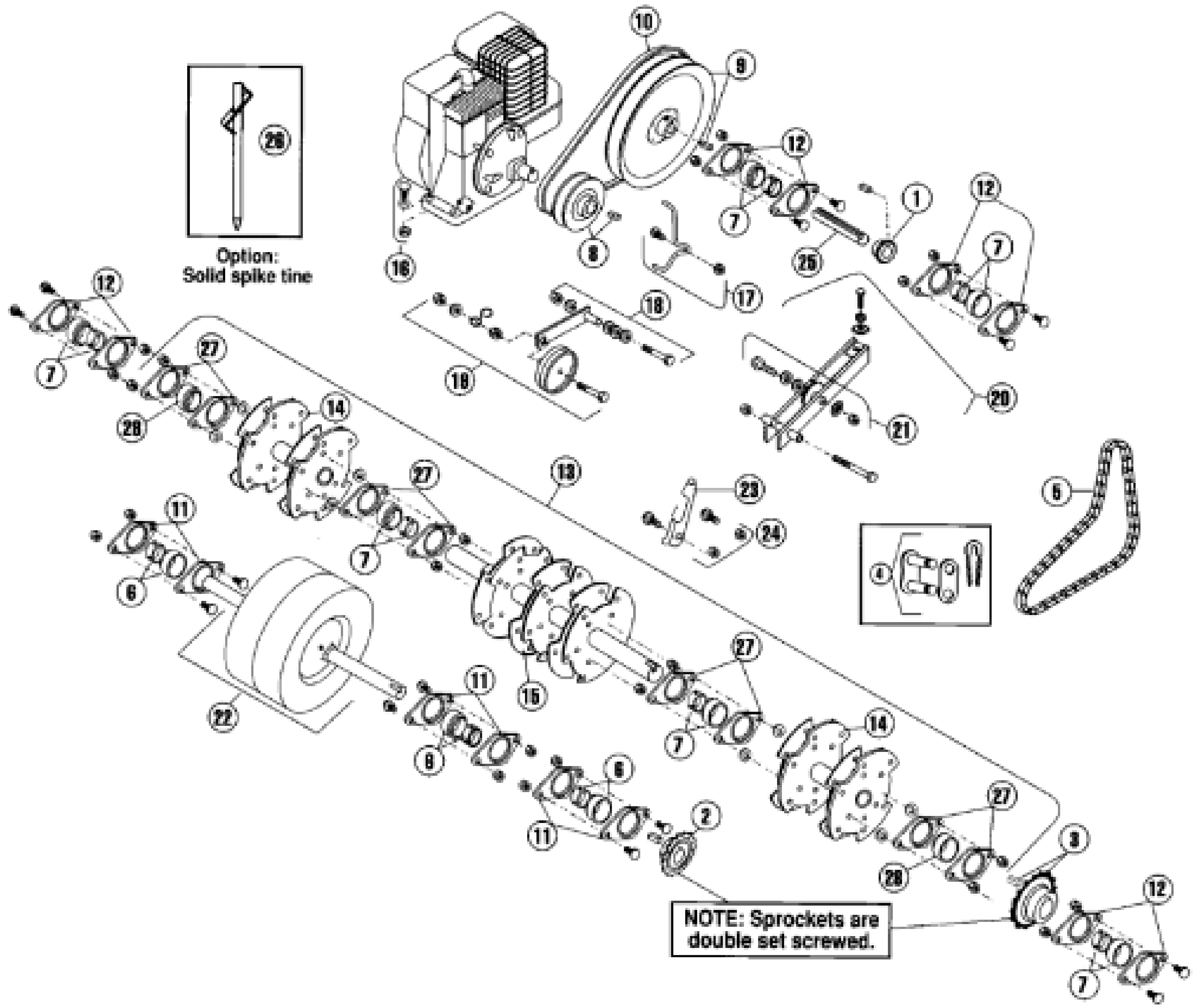
Parts Rear Wheel - Model 742



Parts Rear Wheel - Model 742

ITEM	PART NO.	QTY.	DESCRIPTION
1	7409	2	BEARING, ROLLER W/SEALS
2	7107	2	LIFT LINK
3	7119	1	TORQUE ARM, DEPTH ADJUSTMENT
4	7410	2	AXLE KIT: AXLE, E-CLIP, 2 WASHERS,
			COTTER PIN, HAIRPIN COTTER
5	7163	1	KNOB, DEPTH/STABILITY
6	7195	2	SPRING, AXLE
7	7213	1	CONTROL KIT, DEPTH/STABILITY
8	7214	1	KNOB SPRING KIT, DEPTH/STABILITY
9	7215	1	BRACKET KIT, DEPTH/STABILITY
10	7216	2	FASTENER KIT, TORQUE ARM/HOUSING
11	7217	4	FASTENER KIT, LINKAGE
12	7411	2	FASTENER KIT, CARRIAGE/HOUSING
13	7412	1	WHEEL ARM, RIGHT
14	7413	1	WHEEL ARM, LEFT
15	7414	2	WHEEL ASSBLY.: WHEEL, BEARING, 2 SEALS,
			AXLE, 2 WASHERS, E-CLIP, COTTER PIN,
			HAIRPIN COTTER
16	7415	2	COTTER KEY, HAIRPIN

Parts Power Train & Tine Rotor - Model 742



Parts Power Train & Tine Rotor - Model 742

ITEM	PART NO.	QTY.	DESCRIPTION
1	7416	1	SPROCKET, JACKSHAFT, W/KEY
2	7417	1	SPROCKET, WHEEL W/SET SCREWS & KEY
3	7418	1	SPROCKET, ROTOR, W/SET SCREWS & KEY
4	7419	1	MASTER LINK FOR 7420
5	7420	1	CHAIN, #50 PERMA LUBE ROLLER
6	0315	3	BEARING, 3/4" W/LOCK COLLAR
7	0317	6	BERING, 1" W/LOCK COLLAR
8	0328	1	V-PULLEY, A-4" W/SET SCREWS & KEY
9	7421	1	V-PULLEY, A-10" W/SET SCREWS & KEY
10	0336	1	V-PULLEY, A-44" SPECIAL
11	5185	3	STAMPING KIT W/FASTENERS (FOR 3/4" BEARING)
12	5786	4	STAMPING KIT W/FASTENERS (FOR 1" BEARING)
13	7422	1	TINE ROTOR SHAFT ASSEMBLY, COMPLETE
14	7423	2	OUTER ROTOR PLATE KIT
15	7424	1	CENTER TINE ROTOR SHAFT
16	7204	1	FASTENER KIT, ENGINE
17	7205	1	BELT KEEPER KIT
18	7206	1	IDLER ARM KIT, PULLEY
19	7207	1	IDLER PULLEY KIT
20	7425	1	IDLER ARM KIT, CHAIN
21	7426	1	IDLER SPROCKET KIT, CHAIN
22	7120	1	FRONT WHEEL & SHAFT KIT
23	7111	1	TINE SET, CLOSED SPOON, 42 EACH
	7112	7	TINE SET, CLOSED SPOON, 6 EACH
24	7102	1	TINE/SPIKE FASTENER KIT, 96 EA. BOLTS & NUTS
	7103	7	TINE/SPIKE FASTENER KIT, 12 EA. BOLTS & NUTS
25	7427	1	JACKSHAFT, W/KEY
26	7104	1	SPIKE SET, 42 EACH
27	7105	4	STAMPING KIT (FOR 1" BEARING) W/NUTS & WASHERS
28	7108	2	BEARING, 1" (DOES **NOT** INCLUDE LOCK COLLAR)

One Year Limited Warranty

For one year from purchase, BlueBird willreplace for the original purchaser, free of charge, andy part or parts, found upon examination by any Factory authorized Service Center, or by the Factory at Beatrice, Nebraska, to be defective in material or workmanship or both.

All transportation charges on parts submitted for replacement under this warranty must be paid by purchaser.

THERE IS NO OTHER WARRANTY EXPRESSED OR IMPLIED.

Implies warranties, including those of merchantability and fitness for a particular purpose, are limited to one year from purchase and to the extent permitted by law any and all implied warranties are excluded. This is the exclusive remedy and liability for consequential damages under andy and all warranties is exluded to the extent exclusion is permitted by law.

Blue Bird

Andres Berggren

The engines on all units are warranted by the engine manufacturer. consult warranty shipped with each unit. BlueBird will not be responsible for any engine claims.

BlueBird reserves the right to make changes in design and changes or improvements upon its products without imposing and obligation upon itself to install the same upon its products theretofore manufactured.

BLUEBIRD™